From:	David Hawkins Ex. 6 - Personal Privacy
Sent:	Friday, March 21, 2014 9:51 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	You and Gina can share your experiences there

BEULAH, N.D. — Gina McCarthy was deep in enemy territory.

http://www.nytimes.com/2014/03/22/us/as-listener-and-saleswoman-epa-chief-takes-to-the-road-for-climate-rules.html?emc=eta1&_r=0

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:13 PM
To:	goo.michael@epa.gov
Subject:	Fw: Fwd: Sahu Spreadsheet - please send to all
Attach:	SO2 Master Spreadsheet - Draft to Josh 101812.xlsx

----- Forwarded Message -----
From: Ex. 6 - Philip Goo
To: Ex. 6 - Michael Goo
Sent: Friday, October 19, 2012 8:26 AM
Subject: Fw: Fwd: Sahu Spreadsheet - please send to all

From: Philip Goo <philip.goo@sierraclub.org>
Date: Fri, 19 Oct 2012 08:24:36 -0400
To: Philip Goo Ex. 6 - Personal Privacy
Subject: Fwd: Sahu Spreadsheet - please send to all

---------- Forwarded message ----------
From: Josh Stebbins
Date: Friday, October 19, 2012
Subject: Fwd: Sahu Spreadsheet - please send to all
To: Philip Goo <Philip.Goo@sierraclub.org>, John Coequyt <john.coequyt@sierraclub.org>, Robert Ukeiley <rukeiley@igc.org>, Zachary Fabish <zachary.fabish@sierraclub.org>
Cc: Ranajit Sahu Ex. 6 - Personal Privacy

Attached please find a spreadsheet reflecting Ron's analysis on SO2 v MATS.
If you will not be in today's meeting in person, please use the following call in number at 3pm:

Ex. 6 - Personal Privacy

Thanks
josh

---------- Forwarded message ----------
From: Ranajit Sahu Ex. 6 - Personal Privacy
Date: Fri, Oct 19, 2012 at 1:03 AM
Subject: Sahu Spreadsheet - please send to all
To: josh.stebbins@sierraclub.org

Josh

I am having e-mail issues and the file did not go through to all of the others that you wanted me to send to including Phillip Goo, etc. Can you please send to all. Sorry about this.

Thanks

Ron

--
Joshua Stebbins
Managing Attorney
Sierra Club
50 F Street, NW, Eighth Floor
Washington, DC 20001
202 675 6273
202 547 6009

From:	John Coequyt <john.coequyt@sierraclub.org>
Sent:	Friday, December 6, 2013 7:53 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Fwd: New position at EPA

John Coequyt
202.669.7060

Begin forwarded message:

From: "Beauvais, Joel" <Beauvais.Joel@epa.gov>
Date: December 6, 2013 at 7:22:26 PM EST
To: "Beauvais, Joel" <Beauvais.Joel@epa.gov>
Subject: New position at EPA

Dear friends and colleagues –

With apologies for the mass email, I wanted to let you know that I have moved to a new position here at EPA. I have been named Associate Administrator for EPA's Office of Policy, and have now transitioned out of the Office of Air and Radiation. My coordinates, with the exception of the main line, will remain the same:

Joel Beauvais

Associate Administrator

Office of Policy

U.S. Environmental Protection Agency

beauvais.joel@epa.gov

Main: 202-564-4332

Direct: 202-564-1684

From:	John Coequyt <john.coequyt@sierraclub.org>
Sent:	Friday, November 8, 2013 10:02 AM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Fwd: Utech to replace Zichal permanently

John Coequyt
202.669.7060

Begin forwarded message:

From: POLITICO Pro Whiteboard <politicoemail@politicopro.com>
Date: November 8, 2013 at 9:58:11 AM EST
To: john.coequyt@sierraclub.org
Subject: Utech to replace Zichal permanently
Reply-To: politicoemail@politicopro.com

11/8/13 9:57 AM EST

Dan Utech will succeed Heather Zichal as President Barack Obama's top energy and climate adviser, the White House confirmed this morning.

Utech, who was Zichal's deputy, will be her permanent replacement.

POLITICO reported last month that Utech, who is a former top adviser to then-Energy Secretary Steven Chu and then-Sen. Hillary Rodham Clinton, was expected to replace Zichal.

Today is Zichal's last day at the White House. Utech will take over for her on Monday.

— *Andrew Restuccia and Darren Goode*

From:	Consuegra, Jamie <jconsuegra@nrdc.org>
Sent:	Wednesday, November 13, 2013 3:49 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	New contact info

Hey Michael,

I have a question for you—but I don't have your new contact information. Can you give me a call or drop me a line?

Thanks!

Jamie

Jamie Consuegra

Climate Advocate

Natural Resources Defense Council

1152 15th Street NW, Suite 300

Washington, DC 20005

202-289-2364

From:	John Coequyt <john.coequyt@sierraclub.org>
Sent:	Tuesday, October 15, 2013 5:07 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Fwd: Sup Ct Order

John Coequyt
202.669.7060

Begin forwarded message:

From: Pat Gallagher <pat.gallagher@sierraclub.org>
Date: October 15, 2013 at 3:58:31 PM EDT
To: Verena Owen Ex. 6 - Personal Privacy
Cc: Melinda Pierce <melinda.pierce@sierraclub.org>, "#Strategy-Team" <strategy-team-list@sierraclub.org>
Subject: Sup Ct Order

Folks - here you go. Please keep this internal for now, thanks.
OVERVIEW

The Supreme Court today denied industry and state petitions asking it to overturn its seminal decision in Massachusetts v. EPA. The Court refused to hear industry challenges to EPA'S finding that greenhouse gases endanger public health and welfare, and refused to hear challenges to the standards limiting greenhouse gas pollution from cars and trucks. The Court decided to entertain just one narrow question arising out of EPA's first set of greenhouse gas regulations: whether the regulation of cars and trucks automatically triggered the regulation of large stationary sources such as coal plants and refineries under the preconstruction permitting program in section 165 of the Clean Air Act (also known as the PSD program). The resolution of this question should have little to no practical effect on current efforts to control greenhouse gases from large stationary sources under other parts of the Clean Air Act (or state laws), including EPA's recently proposed new source performance standards under section 111 of the Act.

BACKGROUND

To understand the ramifications of today's Supreme Court order, one must understand some basic structure of the Clean Air Act (the "Act"). Section 202 of the Act governs motor vehicles, and was the basis of the Court's decision in Massachusetts v. EPA. In

Massachusetts v. EPA, the Court first found that greenhouse gases are "air pollutants" under the broad definition in section 302 that applies throughout the Act. The Court then held that section 202 gives EPA full authority to find that greenhouse gases endanger public health and welfare and to regulate tailpipe emissions of greenhouse gases. EPA carried out this authority with its endangerment finding and joint rule with the Department of Transportation setting limits on car and light-duty truck greenhouse gas pollution. The Supreme Court today let these two actions stand.

Section 165 of the Act contains the so-called "Prevention of Significant Deterioration" permitting provisions for large stationary sources of air pollution, such as coal plants and refineries. Section 165 requires such sources to obtain detailed permits with emission limits for all regulated pollutants, including soot and smog-forming emissions. Section 165 requires pollution sources to ensure that they meet emission limits reflecting the "Best Available Control Technology." Generally speaking, section 165 applies to large pollution sources which are undergoing new construction or modification.

When EPA took action on cars and trucks, the agency relied on its longstanding interpretation of the Act and decided that the regulation of greenhouse gases in one part of the Act, section 202, automatically triggered regulation under the PSD permitting program in section 165. This view is logical, and the D.C. Circuit Court of Appeals held that it is compelled by the plain language of the Act, in part because the term "air pollutant" is very broadly defined and cross-referenced throughout the Act to cover all types of air pollution. However, industry challenged EPA's "automatic trigger" view and argued that regulation under section 165 is not automatic, and requires separate agency findings or actions, such as the establishment of ambient air quality standards for greenhouse gases.

Section 111 of the Act gives EPA independent authority to establish performance standards for new sources of air pollution. This provision forms the basis of EPA's recently re-proposed new source performance standards for fossil-fuel fired electric generating units, e.g. coal, gas and oil power plants. Section 111 is not at issue in the Supreme Court and should remain unaffected by the Court's ultimate ruling. This is true for several reasons: EPA is separately making findings under section 111 that fossil-fuel power plants may reasonably be anticipated to endanger public health and welfare; and section 111 sets nationally uniform performance standards by category of polluter, e.g. steel mills, chemical plants, and now coal plants. None of this is jeopardized by today's Supreme Court order.

So what is the worst-case scenario of an eventual Supreme Court ruling ?
Based on the precise question the Court is considering, it could decide that greenhouse gas emissions do not trigger PSD permitting requirements under section 165 for stationary sources. However, the Court may still decide that when a stationary source is subject to section 165 permitting for other pollutants such as smog and soot, it must also control greenhouse gases, even if its greenhouse gas emissions do not independently trigger permitting requirements. Since greenhouse gas pollution is typically accompanied by soot or smog-forming pollution, controls on all pollutants, including greenhouse gases, would still be required in this scenario. Moreover, new fossil-fuel power plants will still have to meet the new source performance standards EPA is now developing under section 111 of

the Act, regardless of what happens to section 165. Ultimately, as EPA and states begin to regulate additional large categories of pollution sources under section 111 and other authorities (e.g. California's AB 32), any gaps in permitting will be closed, and large sources of greenhouse gases will be controlled.

On Tue, Oct 15, 2013 at 12:40 PM, Verena Owen **Ex. 6 - Personal Privacy** wrote:

> can we have some more details about the Supreme Court review of green house gas rule?
>
> On Tue, Oct 15, 2013 at 1:57 PM, Melinda Pierce <melinda.pierce@sierraclub.org> wrote:
>
> > I forgot that Maryanne is off today. There a no DC updates to share. Please share any updates or raise any questions via email today.
> > Implementation Call will go on as scheduled tomorrow
> >
> > --
> > Melinda Pierce
> > Deputy Director, Federal Policy
> > Sierra Club
> >
> > 202-675-7912 (o)
> > 202-544-2975 (c)
> >
> > To unsubscribe from this group and stop receiving emails from it, send a n email to strategy-team-list+unsubscribe@sierraclub.org.

--
Pat Gallagher
Legal Director
Sierra Club
85 Second Street
San Francisco, CA 94105
(415) 977-5709
(415) 977-5793
pat.gallagher@sierraclub.org

From: John Coequyt <john.coequyt@sierraclub.org>
Sent: Saturday, October 26, 2013 1:55 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

---

Didn't come through right.

John Coequyt
202.669.7060

On Oct 26, 2013, at 12:52 PM, Michael Goo < Ex. 6 - Personal Privacy wrote:

> Pls strip all identifying info if you circulate. Thx.
>
> Sent from my iPhone
>
> Begin forwarded message:
>
> **From:** "Goo, Michael" <Goo.Michael@epa.gov>
> **Date:** October 26, 2013, 12:00:53 PM EDT
> **To:** Ex. 6 - Debbie Reed
> Ex. 6 - Michael Goo
> **Subject: Fw: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements**
>
> Associate

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Wednesday, November 6, 2013 1:09 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Section 115 article

FYI

Send me your new work email when you have it.

David

From:	Philip Goo Ex. 6 - Personal Privacy
Sent:	Tuesday, April 9, 2013 10:49 PM
To:	Ex. 6 - Michael Goo
Subject:	Cass Sunstein law review article

--

Philip M. Goo, Esq.

Law Office of Philip M. Goo, PLLC

1377 K St SE Unit 2

Washington, DC 20003

Tel.: 404.583.9451

E-mail: Ex. 6 - Personal Privacy

Counsel for the Sierra Club

From: Jennifer Milley <Jennifer_Milley@lcv.org>
Sent: Wednesday, October 31, 2012 11:07 AM
To:
Subject: Join LCV to celebrate Election Night

LEAGUE OF CONSERVATION VOTERS

CORRIDOR || PARTNERS

NATIONAL WILDLIFE FEDERATION Action Fund

NRDC ACTION FUND
MOBILIZING AMERICA FOR A SUSTAINABLE FUTURE

SIERRA CLUB
FOUNDED 1892

DEFENDERS OF WILDLIFE ACTION FUND

Please join us for an

Election Night Party!

Tuesday November 6, 2012

The Mansion on O Street

2020 O Street, NW

Washington, DC

Hors d'oeuvres & drinks starting at 7:30 p.m.

RSVP at www.lcv.org/electionnight

Hosted by

League of Conservation Voters

Corridor Partners

Defenders of Wildlife Action Fund

National Wildlife Federation Action Fund

Natural Resources Defense Council Action Fund

Sierra Club

For more information please contact Jen Milley at Jennifer_Milley@lcv.org
or (202) 454-4568.

**Invitation is not transferable.*

From: Doniger, David <ddoniger@nrdc.org>
Sent: Sunday, November 11, 2012 6:33 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Sunstein on power plants

Michael,

Take a look at this. Self-serving, but helpful, I think. I intend to brief him confidentially on our report, unless you think that's a mistake.

http://www.nytimes.com/2012/11/11/opinion/sunday/climate-change-lessons-from-ronald-reagan.html?hp&_r=0

November 10, 2012

Climate Change: Lessons From Ronald Reagan

By CASS R. SUNSTEIN

THE re-election of President Obama, preceded by the extraordinary damage done by Hurricane Sandy, raises a critical question: In the coming years, might it be possible for the United States to take significant steps to reduce the risks associated with climate change?

A crucial decision during Ronald Reagan's second term suggests that the answer may well be yes. The Reagan administration was generally skeptical about costly environmental rules, but with respect to protection of the ozone layer, Reagan was an environmentalist hero. Under his leadership, the United States became the prime mover behind the Montreal Protocol, which required the phasing out of ozone-depleting chemicals.

There is a real irony here. Republicans and conservatives had ridiculed scientists who expressed concern about the destruction of the ozone layer. How did Ronald Reagan, of all people, come to favor aggressive regulatory steps and lead the world toward a strong and historic international agreement?

A large part of the answer lies in a tool disliked by many progressives but embraced by Reagan (and Mr. Obama): cost-benefit analysis. Reagan's economists found that the costs of phasing out ozone-depleting chemicals were a lot lower than the costs of not doing so — largely measured in terms of avoiding cancers that would otherwise occur. Presented with that analysis, Reagan decided that the issue was pretty clear.

Much the same can be said about climate change. Recent reports suggest that the economic cost of Hurricane Sandy could reach $50 billion and that in the current quarter, the hurricane could remove as much as half a percentage point from the nation's economic growth. The cost of that single hurricane may well be more than five times greater than that of a usual full year's worth of the most expensive regulations, which ordinarily cost well under $10 billion

annually. True, scientists cannot attribute any particular hurricane to greenhouse gas emissions, but climate change is increasing the risk of costly harm from hurricanes and other natural disasters. Economists of diverse viewpoints concur that if the international community entered into a sensible agreement to reduce greenhouse gas emissions, the economic benefits would greatly outweigh the costs.

Skeptics have rightly observed that even aggressive regulatory steps by the United States cannot stop climate change. Greenhouse gases stay in the atmosphere for decades, and many nations, especially in the developing world, are contributing growing levels of emissions. For this reason, the unilateral actions of any country will not do what must be done to reduce anticipated warming and the resulting harms. Nonetheless, cost-effective reductions from the United States would help, both in themselves and because they should spur technological changes and regulatory initiatives from other nations.

For the United States, some of the best recent steps serve to save money, promote energy security and reduce air pollution. A good model is provided by rules from the Department of Transportation and the Environmental Protection Agency, widely supported by the automobile industry, which will increase the fuel economy of cars to more than 54 miles per gallon by 2025.

The fuel economy rules will eventually save consumers more than $1.7 trillion, cut United States oil consumption by 12 billion barrels and reduce greenhouse gas emissions by six billion metric tons — more than the total amount of carbon dioxide emitted by the United States in 2010. The monetary benefits of these rules exceed the monetary costs by billions of dollars annually.

In a similar vein, recent rules from the Department of Energy are requiring greater energy efficiency from appliances like refrigerators, washing machines and small motors. For these rules as well, the monetary benefits dwarf the costs, and they include large savings to consumers as well as pollution reductions. There is a lot more to achieve in the area of energy efficiency, especially as technologies advance and continue to transform the once-impossible into the eminently doable.

The electricity sector is responsible for more than a third of greenhouse gas emissions in the United States. In this domain, any regulations must be carefully devised, as they were in the case of fuel economy, to ensure that they do not impose unjustified costs, especially in an economically difficult period. But just as in that case, it should be possible to work with affected companies to identify flexible and cost-conscious approaches, producing reductions while minimizing regulatory burdens.

As in the case of the Montreal Protocol, an effective response to climate change requires many nations to act. China is the biggest greenhouse gas emitter on the planet, and it must become a leader in international negotiations, not an obstacle. But smart initiatives from the United States may well be an indispensable precondition for international efforts.

For those who seek to reduce the risks associated with climate change, it is ironic but true that the best precedent comes from a conservative icon. The big question now is whether today's Republicans will follow Reagan's example.

Cass R. Sunstein is a professor at Harvard Law School and a former administrator of the White House Office of Information and Regulatory Affairs.

David D. Doniger

Policy Director, Climate and Clean Air Program

Natural Resources Defense Council

1152 15th Street, NW, Suite 300

Washington, DC 20005

Phone: (202) 289-2403

Cell: (202) 321-3435

Fax: (202) 289-1060

ddoniger@nrdc.org

on the web at www.nrdc.org

read my blog: http://switchboard.nrdc.org/blogs/ddoniger/

From:	Ex. 6 - Philip Goo
Sent:	Friday, October 19, 2012 8:26 AM
To:	Ex. 6 - Michael Goo
Subject:	Fw: Fwd: Sahu Spreadsheet - please send to all
Attach:	SO2 Master Spreadsheet - Draft to Josh 101812.xlsx

From: Philip Goo <philip.goo@sierraclub.org>
Date: Fri, 19 Oct 2012 08:24:36 -0400
To: Philip Goo Ex. 6 - Personal Privacy
Subject: Fwd: Sahu Spreadsheet - please send to all

---------- Forwarded message ----------
From: Josh Stebbins
Date: Friday, October 19, 2012
Subject: Fwd: Sahu Spreadsheet - please send to all
To: Philip Goo <Philip.Goo@sierraclub.org>, John Coequyt <john.coequyt@sierraclub.org>, Robert Ukeiley <rukeiley@igc.org>, Zachary Fabish <zachary.fabish@sierraclub.org>
Cc: Ranajit Sahu Ex. 6 - Personal Privacy

Attached please find a spreadsheet reflecting Ron's analysis on SO2 v MATS.
If you will not be in today's meeting in person, please use the following call in number at 3pm:
Ex. 6 - Personal Privacy
Thanks
josh

---------- Forwarded message ----------
From: Ranajit Sahu Ex. 6 - Personal Privacy
Date: Fri, Oct 19, 2012 at 1:03 AM
Subject: Sahu Spreadsheet - please send to all
To: josh.stebbins@sierraclub.org

Josh

I am having e-mail issues and the file did not go through to all of the others that you wanted me to send to including Phillip Goo, etc. Can you please send to all. Sorry about this.

Thanks

Ron

--
Joshua Stebbins
Managing Attorney
Sierra Club
50 F Street, NW, Eighth Floor
Washington, DC 20001
202 675 6273
202 547 6009

Plant	State	MW	Unit	Stack ID	Fuel	SO2 Controls	Modeled Emission Rates (g/s)	Modeled Impact (w/o background] avg. of 4th high (ug/m3)	Modeled SO2 Conc. / 1-hr NAAQS
Big Brown	TX	1195	1	1	LIG	N/A	1432	496.1	2.53
Big Brown	TX	1195	2	2	LIG	N/A	1336		
Big Sandy	KY	1097	1	combined stack	BIT	N/A	894	**264.1**	1.35
Big Sandy	KY	1097	2		BIT	N/A	1822		
Brayton Point	MA	1125	1	S01	BIT	Wet Scrubber	459	**800.9**	4.09
Brayton Point	MA	1125	2	S02	BIT	Wet Scrubber	507		
Brayton Point	MA	1125	3	S03	BIT	NIDS in 2011	1350		
Harllee Branch	GA	1746	1		BIT	N/A	688	**717.9**	3.66
Harllee Branch	GA	1746	3		BIT	N/A	843		
Harllee Branch	GA	1746	4		BIT	N/A	1601		
Harllee Branch	GA	1746	4		BIT	N/A	1626		
Homer City	PA	2012	1		BIT	N/A	2631.3	1389.2	7.09
Homer City	PA	2012	2		BIT	N/A	2539.4		
Homer City	PA	2012	3		BIT	Wet Scrubber	260		
Monroe	MI	3280	1	1	SUB	N/A	439.53	369.9	1.89
Monroe	MI	3280	2	2	SUB	N/A	439.53		
Monroe	MI	3280	3	3	SUB	Wet Scrubber	439.53		
Monroe	MI	3280	4	4	SUB	Wet Scrubber	439.53		
Monticello	TX	1890	1	1	LIG	N/A	877.84	336.3	1.72
Monticello	TX	1890	2	2	LIG	N/A	860.3		
Monticello	TX	1890	3	3	LIG	Wet Scrubber	633.43		

2011 Emission Rates (g/s)	Reduction in 2011 Emission Rate as Compared to Modeled	Adjusted Concentration Using 2011 ER (ug/m3)	Adjusted Modeled to NAAQS Ration using 2011 ER	Implication before MATS Considerations
956	0.33	356.6	1.82	Needs scrubbers
1029	0.23			
367.2	0.59			Will comply with NAAQS after U1 is converted to NG, as announced]
1087.2	0.40			
182.1	0.60	339.4	1.73	Need to assess impact of new NIDS on U3, from 2012 data. Possible improvement from U1, U2 DFGDs also.
204.6	0.60			
636.6	0.53			
342.1	0.50	367.9	1.88	U1, U2 slated for shutdown in 2013. Also, U3, U4 supposed to install scrubbers by 2015. Also, entire station may shut down.
436.2	0.48			
806.5	0.50			
862.8	0.47			
1639.3	0.38	867.5	4.43	See post-MATS implication.
1618.5	0.36			
133.5	0.49			
794	-0.81	333.6	1.70	Should be able to comply after WFGDs on U1, U2 in 2014
734.5	-0.67			
39.6	0.91			
17.5	0.96			
658	0.25	246.2	1.26	Improved WFGD on U3 and possibly DSI on Units 1 and 2 needed for NAAQS. May also need BH on U1, U2 for DSI.
633.6	0.26			
449.8	0.29			

Implication with MATS Considerations
MATS via direct HCl compliance - no SO2 surrogacy allowed
Did not analyze. Cannot use MATS surrogacy for U2.
If SO2 surrogacy is used for MATS, will comply with NAAQS - i.e., MATS is more stringent
Did not analyze. Station likely to shutdown before MATS is effective.
Around 94% reduction at U1, U2 and 14% at U3 needed for MATS. If so, will meet NAAQS.
Should be able to comply with MATS also after WFGDs on U1, U2 in 2014 - i.e., both NAAQS and MATS will be met with WFGDs
If SO2 surrogacy is used for MATS, will comply with NAAQS - i.e., MATS is more stringent

From:	David Hawkins Ex. 6 - Personal Privacy
Sent:	Sunday, September 23, 2012 9:50 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Lunch Monday?

My plans changed and lunch is now open for me Monday if that is better for you.

Sent from my iPad

From: David Hawkins Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 8:35 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.

Sent from my iPad

On Sep 25, 2012, at 8:31 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> No lets go there. I can move my 1 pm
>
> Sent from my iPhone
>
> On Sep 25, 2012, at 8:05 AM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
> > Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
> >
> > On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
> >
> > > Good question. What's near you?
> > >
> > > Sent from my iPhone
> > >
> > > On Sep 24, 2012, at 6:00 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
> > >
> > > > Where are we having lunch?
> > > >
> > > > Sent from my iPad
> > > >
> > > > On Sep 24, 2012, at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
> > > >
> > > >> Let's keep it on for Tuesday if that still works.
> > > >>
> > > >> Sent from my iPhone
> > > >>
> > > >> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy

wrote:
>>
>>> My plans changed and lunch is now open for me Monday if that is better for you.
>>>
>>> Sent from my iPad

From: David Hawkins Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 8:05 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call

On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> Good question. What's near you?
>
> Sent from my iPhone
>
> On Sep 24, 2012, at 6:00 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
> > Where are we having lunch?
> >
> > Sent from my iPad
> >
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> >
> >> Let's keep it on for Tuesday if that still works.
> >>
> >> Sent from my iPhone
> >>
> >> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
> >>
> >>> My plans changed and lunch is now open for me Monday if that is better for you.
> >>>
> >>> Sent from my iPad

From: David Hawkins Ex. 6 - Personal Privacy
Sent: Monday, September 24, 2012 6:01 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

Where are we having lunch?

Sent from my iPad

On Sep 24, 2012, at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> Let's keep it on for Tuesday if that still works.
>
> Sent from my iPhone
>
> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
>> My plans changed and lunch is now open for me Monday if that is better for you.
>>
>> Sent from my iPad

From: David Hawkins Ex. 6 - Personal Privacy
Sent: Monday, September 24, 2012 9:31 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

---

ok

On Mon, Sep 24, 2012 at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> Let's keep it on for Tuesday if that still works.
>
> Sent from my iPhone
>
> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
> > My plans changed and lunch is now open for me Monday if that is better for you.
> >
> > Sent from my iPad

From: David Hawkins Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 10:38 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

Lincoln is on Vermont Ave b/n L and M Sts NW; one block from new NRDC office. I got a message you are coming to the NRDC office. RIght?

On Tue, Sep 25, 2012 at 8:46 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> Yep. 1 pm Lincoln. Where is Lincoln?
>
> Sent from my iPhone
>
> On Sep 25, 2012, at 8:34 AM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
> > Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.
> >
> > Sent from my iPad
> >
> > On Sep 25, 2012, at 8:31 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
> >
> > > No lets go there. I can move my 1 pm
> > >
> > > Sent from my iPhone
> > >
> > > On Sep 25, 2012, at 8:05 AM, David Hawkins Ex. 6 - Personal Privacy wrote:
> > >
> > > > Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
> > > >
> > > > On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
> > > >
> > > > > Good question. What's near you?
> > > > >
> > > > > Sent from my iPhone

On Sep 24, 2012, at 6:00 PM, David Hawkins
Ex. 6 - Personal Privacy wrote:

> Where are we having lunch?
>
> Sent from my iPad
>
> On Sep 24, 2012, at 9:03 AM, Michael Goo
Ex. 6 - Personal Privacy wrote:
>
>> Let's keep it on for Tuesday if that still works.
>>
>> Sent from my iPhone
>>
>> On Sep 23, 2012, at 9:50 PM, David Hawkins
Ex. 6 - Personal Privacy wrote:
>>
>>> My plans changed and lunch is now open for me Monday if that is better for you.
>>>
>>> Sent from my iPad

From:	Rosenberg, Daniel <drosenberg@nrdc.org>
Sent:	Monday, May 14, 2012 1:30 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	This is definitely worth checking out when you have a few minutes

---

Hi Michael,

Here is the ultimate rebuke for the industries and their supporters (wherever they reside) against burdensome government regulations in an area where the Administrator has been a leader all along.

http://media.apps.chicagotribune.com/flames/index.html (incredible 4-part series on the deceit of the chemical and tobacco industries that has led to toxic flame retardants being poured into furniture and other household products – this will win some awards);

http://www.chicagotribune.com/news/opinion/editorials/ct-edit-fire-20120511,0,7668934.story (the follow-up editorial by the Chicago Tribune)

My blog about the series, and the larger context of the need for action on chemical reform: http://switchboard.nrdc.org/blogs/drosenberg/profile_of_the_chemical_indust.html

Hope you are doing well,

Daniel

Daniel Rosenberg

Senior Attorney, Health and Environment Program

Natural Resource Defense Council (NRDC)

1152 15th Street, NW

Suite 300

Washington, DC 20005

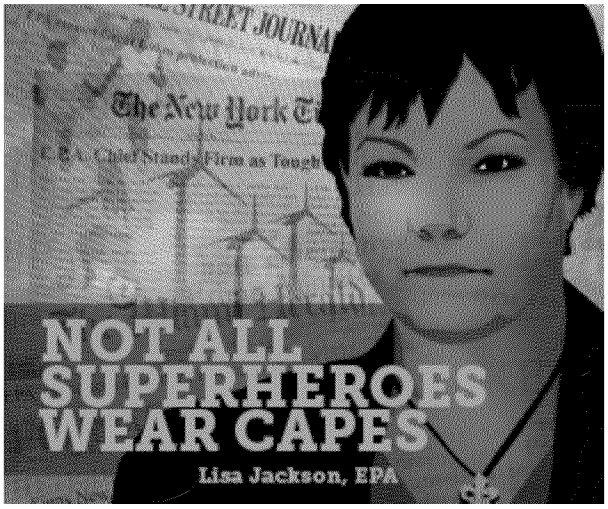
(202) 289-6868

You can read my blog on toxic chemical policy at: http://switchboard.nrdc.org/blogs/drosenberg/

From:	John Coequyt <john.coequyt@sierraclub.org>
Sent:	Thursday, July 19, 2012 2:33 PM
To:	**Ex. 6 - Michael Goo**
Subject:	Superhero
Attach:	LisaJacksonBannerAd_300x250.jpg

Here is the ad.

--
John Coequyt
Sierra Club
202-669-7060


NOT ALL
SUPERHEROES
WEAR CAPES
Lisa Jackson, EPA

From: Rosenberg, Daniel <drosenberg@nrdc.org>
Sent: Thursday, January 5, 2012 3:25 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: RE: Yo

So, Anastas is leaving. It is critical to get somebody good in there, including whoever will be acting. It needs to be somebody who gets the importance of the NAS Science and Decisions report and is committed to implementing those recommendations, not just moving the boxes around at ORD. And you have the IRIS rider as cover! Ask your staff about it. Have Tom Burke, the Chair of the Panel who wrote the report come brief the Administrator!

-----Original Message-----
From: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, December 16, 2011 12:58 PM
To: Rosenberg, Daniel
Subject: Yo

Sent from my iPhone

From: Rosenberg, Daniel <drosenberg@nrdc.org>
Sent: Friday, January 6, 2012 11:43 AM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: RE: Yo

Hey, re Acting for ORD when Anastas leaves --- Inside EPA floated Ramona Trovato's name as a possible acting. That would be very good.

-----Original Message-----
From: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, December 16, 2011 12:58 PM
To: Rosenberg, Daniel
Subject: Yo

Sent from my iPhone

From: Rosenberg, Daniel <drosenberg@nrdc.org>
Sent: Tuesday, January 3, 2012 1:56 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: RE: Yo

Hey, Happy New Year.

Here are a couple of blogs I posted that might be of at least limited interest.

http://switchboard.nrdc.org/blogs/drosenberg/cancer-causing_chemicals_have.html

http://switchboard.nrdc.org/blogs/drosenberg/cancer-causing_chemicals_have_1.html

-----Original Message-----
From: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, December 16, 2011 12:58 PM
To: Rosenberg, Daniel
Subject: Yo

Sent from my iPhone

From:	Rosenberg, Daniel <drosenberg@nrdc.org>
Sent:	Friday, December 16, 2011 2:30 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	RE: Yo

Hey, great seeing you. Let's do that again sometime soon.

Attached is our Issue Paper about the NAS Report, Science and Decisions. This summarizes what we consider to be the most important recommendations made by the NAS. This report, Science and Decisions, if it were implemented, would be a total game changer for regulating toxics, not just under the TSCA program -- air, water, everything. It doesn't require Congressional action, and I don't think it would fall under OMB's purview either. In other words, I think you are sitting on a gold mine.

The chemical industry is organizing to attack this report, but it is tricky because they can't really attack the NAS. By the way, the Chair of this NAS panel.

This is not our final-Final version of this Issue Paper, the format for publication still needs to be finished, but the content is not likely to change. We'll be releasing it in early to mid January I think.

The report language in the Omnibus that pertains to the IRIS program requires in part:

"The Agency shall incorporate, as appropriate, based on chemical-specific datasets and biological effects, the recommendations of Chapter 7 of the National Research Council's Review of the Environmental Protection Agency's Draft IRIS Assessment of Formaldehyde into the IRIS process."

Chapter 7 of the Review of EPA's IRIS Assessment of Formaldehyde relies in part on the earlier Sciences and Decisions report (page 153):

Most recently, in the "Silver Book," Science and Decisions: Advancing Risk Assessment, an NRC committee extended the framework of the Red Book in an effort to make risk assessments more useful for decisionmaking (NRC 2009).

Those and other reports have consistently highlighted the necessity for comprehensive assessment of evidence and characterization of uncertainty and variability, and the Silver Book emphasizes assessment of uncertainty and variability appropriate to the decision to be made.

Science and Decisions: Advancing Risk Assessment made several recommendations
directly relevant to developing IRIS assessments, including the draft formaldehyde assessment. First, it called for the development of guidance related
to the handling of uncertainty and variability, that is, clear definitions and
methods.

Second, it urged a unified dose-response assessment framework for chemicals that would link understanding of disease processes, modes of action,
and human heterogeneity among cancer and noncancer outcomes. Thus, it suggested
an expansion of cancer dose-response assessments to reflect variability and uncertainty more fully and for noncancer dose-response assessments to reflect
analysis of the probability of adverse responses at particular exposures.
Although that is an ambitious undertaking, steps toward a unifying framework
would benefit future IRIS assessments.

Third, the Silver Book recommended
that EPA assess its capacity for risk assessment and take steps to ensure that it is
able to carry out its challenging risk-assessment agenda. For some IRIS assessments,
EPA appears to have difficulty in assembling the needed multidisciplinary
teams.

So, Congress just directed EPA to follow the recommendations of the NAS, which includes implementation of the Science and Decisions report (which is also referred to as "the Silver Book"). This is a huge opportunity to bring EPA's science up-to-date with where chemical assessment is outside the agency, and where it is heading. Like I said above, you are sitting on a goldmine here. We don't like this rider, but it is a huge opportunity that you should not miss. Speak to Al and Dan about it.

Daniel

-----Original Message-----
From: Michael Goo [Ex. 6 - Personal Privacy]
Sent: Friday, December 16, 2011 12:58 PM
To: Rosenberg, Daniel
Subject: Yo

Sent from my iPhone

From:	Rosenberg, Daniel <drosenberg@nrdc.org>
Sent:	Monday, February 6, 2012 10:40 AM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	RE: Yo

Yo.

I don't have a phone number for you. When you have a minute (or less), can you call my cell? I have a quick yes or no question for you. I'm out of the office, working at home for awhile, so the best way to reach me is on my cell (that is, my NEW iPHONE!!).

Ex. 6 - Personal Privacy

Thanks, hope you are well.

From: Michael Goo Ex. 6 - Personal Privacy
Sent: Fri 12/16/2011 12:58 PM
To: Rosenberg, Daniel
Subject: Yo

Sent from my iPhone

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Wednesday, October 26, 2011 8:16 PM
To:	Michael Goo; Ex. 6 - Personal Privacy
Subject:	CCS projects

Here is info on one of the projects –the one in Idaho. It has a CO2 limit in its permit. It also appears that it is no longer an EGU.

http://www.martenlaw.com/newsletter/20091214-permit-with-enforceable-co2-limits

First State Air Permit With Enforceable CO2 Limits Issued For Idaho Coal-Fueled Fertilizer Plant

By Svend Brandt-Erichsen

December 14, 2009

A proposed Idaho plant that will gasify coal as a feedstock for fertilizer has become the first coal-fueled facility in the U.S. to accept enforceable limits on carbon dioxide (CO2) emissions.[1] The limits are premised on capture and sequestration of 58 percent of the plant's CO2 output, reducing its emissions to that of a natural gas-supplied facility. The project proponent accepted the CO2 limits as part of a settlement with the Sierra Club and the Idaho Conservation League The proposed plant is to be located southwest of Pocatello, Idaho.[2] The State of Idaho does not regulate CO2 as a pollutant under its air laws, and has been careful to state that the limits voluntarily assumed by the project will not be considered binding on other Idaho facilities.[3] Nonetheless, if EPA proceeds with proposed regulatory actions that bring CO2 emissions within the Clean Air Act's permitting requirements, and this project is constructed and implements carbon capture and sequestration as planned, it will set a technology standard that will be relevant to future project permitting.

The project, known as the Power County Advanced Energy Center and being developed by Southeast Idaho Energy, LLC,[4] is designed to gasify 2,000 to 2,300 tons per day of coal and petcoke. The resulting synthesis gas would be used to manufacture ammonia, which would then be used to produce nitrogen-based fertilizers.[5] Natural gas is commonly used as a fertilizer feedstock, and this apparently provides the rationale for reducing CO2 emissions from the plant to roughly the equivalent of what would be emitted by a similar-sized fertilizer plant supplied by natural gas.[6] The plant developer plans to capture at least 58 percent of the CO2 that otherwise would be emitted by the plant, and sequester it in oil fields in Southwestern Wyoming, approximately 80 miles away.[7]

…

Background on Power County Advanced Energy Center

The Idaho project was first proposed in 2005 as a 520 megawatt Integrated Gasification Combined Cycle ("IGCC") power plant. In 2007, the project was reconfigured as a fertilizer and synthetic diesel fuel plant, with feedstocks to be supplied through coal gasification.[8]In 2008, the scope of the project was limited to production of fertilizer products and elemental sulfur, still based upon gasified coal.[9]

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Wednesday, March 28, 2012 6:02 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: FW: EPA air chief dodges questions on GHG rule for existing power plants

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This is not a good situation. Somebody needs to convince the WH that muzzling what the admin says about existing sources will just be made into an issue itself by Barton and others.

Why not say, "the law does require us and the states to develop programs for existing sources and when we start that work it will be done with the full consideration of costs, technologies, energy impacts, and benefits that the law specifies any such standards must be based on."

An E&E Publishing Service

CLIMATE: EPA air chief dodges questions on GHG rule for existing power plants (Wednesday, March 28, 2012)

Nick Juliano, E&E reporter

U.S. EPA's top air official engaged in some tricky rhetorical gymnastics on Capitol Hill today as she tried to ease concerns that the agency would follow up on its just-announced rule to limit greenhouse gas emissions from new coal plants with a similar measure targeting existing facilities. However, she refused to say such a measure would not come up if President Obama wins a second term.

After yesterday's proposal of rules that would effectively bar the construction of new coal-fired power plants unless those facilities capture and sequester their carbon dioxide emissions, EPA Administrator Lisa Jackson stressed that the agency has "no plans" for an existing source rule. Gina McCarthy, the agency's assistant administrator for air and radiation, echoed that line during a House subcommittee hearing today, although she left open the possibility that those plans would materialize at some point.

"So I can say that for the rest of the Obama administration, [Administrator] Lisa Jackson and the EPA are not going to issue a regulation for existing power plants, on greenhouse gases?" asked Rep. Joe Barton (R-Texas).

But McCarthy would not go that far.

"Right now we are focused solely on what we have already proposed, which is getting comment on new source standards, which is the premise for moving forward," she said. "We are looking forward to those comments, and we want to make sure we get the new source performance standard right, that we protect existing facilities at this point, to make sure that if we propose for existing in the future, that would be a standard that would be established in a separate rulemaking."

Barton said that response reminded him of President Clinton's infamous quibbling with the definition of the word "is."

Later in the hearing, McCarthy defended EPA's proposed new-source rule as an unavoidable consequence of the 2007 Supreme Court decision in *Massachusetts v. EPA* that established CO2 and other heat-trapping gases were "pollutants" as defined by the Clean Air Act.

"The reason for regulating greenhouse gases from power plants is because greenhouse gases pose a danger to the public health and welfare, and they are a regulated pollutant, and as a regulated pollutant under the Clean Air Act, we must move forward with new source performance standards. That's why we did the rule," she said.

McCarthy would not answer when asked after the hearing whether that same obligation to regulate greenhouse gases applied to existing sources, and an EPA spokeswoman did not respond to requests for comment this afternoon.

Nonetheless, the law is clear that EPA will eventually have to promulgate a rule to apply to existing coal-fired power plants and other large sources of emissions, although the agency has broad discretion over how strict any requirements should be for existing facilities, said Patrick Parenteau, a professor at Vermont Law School.

"I know EPA is, for obvious reasons, playing pretty coy until after the election," he said. But "I would say they have a duty to do something as a result of *Mass.*; they don't have the luxury of doing nothing."

The new-source rule proposed yesterday emerged from the terms of a 2010 settlement agreement with environmental groups, under which the agency also agreed to craft greenhouse gas emissions rules for existing power plants and petroleum refineries. While the agency has strenuously avoided providing details on the development of those rules, environmental groups are confident they will be proposed eventually (*E&E Daily*, March 28).

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Tuesday, March 27, 2012 4:59 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	FW: Greenpeace reactive to NSPS rule

FYI. Greenpeace release on the proposal and my comment on it sent to CLEAN list.

Kyle from Greenpeace responded off list to say they have every intention of working to get this rule adopted and asked that I pass this along to people at EPA.

On Tue, Mar 27, 2012 at 3:44 PM, Hawkins, Dave <dhawkins@nrdc.org> wrote:

Thanks Kyle. Just a few clarifications on the provisions flagged in your statement.

Biomass: the rule applies to units rated to burn a certain amount of fossil fuels (250mmBTU/hr). Any biomass burned at such units will have its carbon included in the emissions for the unit for compliance purposes.

One-year escape hatch: this provision only applies to units that have all their permits as of the date of proposal (and a few units with DOE funding that are seeking permit renewal). While obnoxious, the impact of this should be pretty small. As EPA's RIA points out, with today's gas prices (and even with gas prices several times today's gas prices), it is not competitive to build new coal units. So the ability of these permitted units to lock-in their financing so that they can begin physical construction in 12 months is very small. Fine to criticize the provision but important to understand its real impact.

30-year averaging provision: the proposal would allow a coal unit to be built without CCS at startup but it would impose a legally enforceable obligation to meet a much tighter limit in year 11. While there is always a risk that under such a scheme that the government might blink and not enforce the second stage when it comes due, it is important to view this from the perspective of the banks who will be asked to finance these projects. Ten-years is not enough time for investors to get their money back on new coal plants, even if the projected power market conditions were better for coal than they are today. Investors will demand coal plant developers

show them a business plan that includes CCS and pencils out to produce a commercial return. Sham CCS projects will not be able to pass this test and will not get financed. In addition, state regulatory commissions will not be able to approve rate recovery for such plants based on a assumption that the rule might be changed.

To the extent these features in the rule substantially increase its ability to weather the political attacks that will be waged against it, I think that most of us will feel we are better off as a result.

David

From: On Behalf Of Kyle Ash
Sent: Tuesday, March 27, 2012 3:11 PM
To:
Subject: Greenpeace reactive to NSPS rule

http://www.greenpeace.org/usa/en/media-center/news-releases/New-greenhouse-gas-rules-riddled-with-loopholes/

Media release - March 27, 2012

The new greenhouse gas rules issued by the Environmental Protection Agency today are welcome, but disappointing, says Greenpeace USA.

"Today, the EPA issued an historic limit on carbon pollution from new power plants. Administrator Lisa Jackson and Gina McCarthy are climate heroes for moving forward despite a begrudging White House and a Congress mired by a radical right wing in love with coal and oil," says Greenpeace Climate Campaigner Kyle Ash.

The decision comes as members of the Utility Air Regulatory Group (UARG) - including Duke Energy, Dominion Energy, and Southern Company - fight tooth and nail against basic environmental protections and the basic idea that climate pollution endangers Americans. "The UARG does not care about communities who will lose their homes from rising sea levels, more frequent wildfires, and freak storms – all caused by climate disruption."

"Unfortunately, this standard is riddled with weaknesses, like exemptions for biomass and carbon capture and storage, and it does nothing to drive down current climate pollution," Mr Ash says.

Three huge loopholes seriously undermine this pollution standard. First, the EPA has again exempted pollution from burning biomass. Biomass can have higher climate emissions than coal, while the resilience of American forests is doubly compromised by rising temperatures. Second, the EPA has offered a one year free-for-all so industry can scramble to get coal plants approved and avoid any limits. Third, the EPA allows new coal plants to pollute freely for ten years as long as they integrate carbon capture and storage technology (CCS) and lower emissions enough to bring their annual average pollution down to the limit after 30 years. The EPA, in effect, has defined an exemption based on unproven technology that even in theory would sequester carbon while exacerbating other catastrophic coal issues – such as mountaintop removal and generating millions of tons of toxic coal ash.

In 2007 the Supreme Court required the EPA develop climate pollution standards, a decision industry polluters

continue to fight. Although this standard is anti-climactic since it only limits emissions from power plants not yet built, old coal continues to fight a market that has clearly realized coal power is dirty, old, and expensive.

While the new rule may help keep new giant sources of emissions from coming online, the Obama administration has yet to require limits on carbon pollution from existing stationary sources. "The President should stand by Administrator Jackson and her team as they push corporate polluters to reduce the CO2 spewing from smokestacks *today*," Mr Ash says.

For further information, contact: Keiller MacDuff 202 679 2236

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Kyle Ash
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Greenpeace USA
Washington, DC
office: 202 319 2417
mobile: 202 441 1314
skype: kyleash
twitter: @gpkyleash

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From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Saturday, December 10, 2011 5:38 AM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	Fwd: Draft blog on EPA GHG NSPS
Attach:	What New Coal Plants.docx; ATT30924.htm

FYI. I think I should use the Inside EPA piece to get our views out there before the WSJ-Limbuagh-Fox echo chamber starts up.
I am interested in your feedback.
David

Sent from my iPad

Attached and pasted in is a draft blog responding to the industry attacks launched in Fridays Inside EPA piece. I would like to post Monday morning so please give me your comments before then.

David

What New Coal Plants?

Flacks for the coal lobby have their hair on fire about the rumored content of a draft EPA rule for CO2 pollution from new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for the foreseeable future. We dont know what the draft rule says but we should all be asking a simple question. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?

Lets look at the facts. Starting about ten years ago, there were waves of announcements for scores of new coal plants. In all, nearly 200 coal plants were proposed. Now only a handful of these projects are technically alive and they are on life support. A small number of proposed plants have permits but like many previous plants with such permits, most if not all of these proposals will turn out to be vaporware. A permit may get a developer a

meeting with project financiers but it will not get their money. The finance community understands new coal plants are simply not economic, given the alternatives that are available.

Other than a few plants under construction there is virtually no prospect of new conventional coal plants being built in the next quarter century according to the Energy Information Administration [Link to AEO2011]. EIA reports no new planned coal plants coming online after 2012 and only two unplanned gigawatts (GW) of coal with carbon capture and sequestration coming online around 2017; then nothing more through 2035, the end of the EIA forecast period.

Are the rumored new EPA CO2 standards responsible for the collapse of the new coal plant boom? No. New coal plants have succumbed to market forces. Abundant supplies of natural gas have produced lower prices for that fuel and those low prices seem here to stay. Materials costs have risen substantially and that makes capital-intensive coal plants a bad bet. Energy efficiency is increasingly recognized as the smartest way to balance power supply and demand and that is enabling economic growth with lower electricity demand. Cost reductions in renewable resources like wind and solar, along with supportive policies, have resulted in rapid growth of these projects to meet new demand and replace retiring dirty coal plants.

The market is also penalizing proposals for new conventional coal plants due to their very high CO2 emissions. Financiers know that denying the fact of global warming will not make it go away. So a project with high CO2 emissions has a large built-in financial risk that only grows over time. And that risk is unbounded, since without a clear policy roadmap it is impossible to calculate a reliable estimate of what it will cost to mitigate a conventional coal plants high CO2 emissions.

The long lead time for coal plants underscores the conclusion that these projects are bad bets. It takes about ten years to build a coal plant from initial conception to start-up. Then it takes another 15-25 years for investors to get their money back. Even without low gas prices, an investor would have to believe that no action to address CO2 pollution will be taken over the next quarter century for them to put their money at risk in new conventional coal plants. This is not a risk that sensible investors are willing to take. So it should be no surprise that plans for new coal plants have been abandoned right and left in the United States.

As for a new EPA standard for CO2, we wont know what it says until early next year according to EPA Administrator Lisa Jackson. But lets assume EPA were to set a fuel-neutral standard for new fossil plants; one that could be met by new natural gas combined

cycle plants or by new coal plants with carbon capture and storage. Such a standard would not prevent the construction of new coal plants, if and when the private sector decides such plants are a better option than alternatives. No, such a standard would just provide a level playing field for the two leading fossil fuels in the power sector: coal and natural gas. (Such a rule would not be a truly level playing field for electric resource investments since it would still heavily favor fossil fuels over zero-emitting options like efficiency, renewables, or nuclear if the latters many problems could be solved.)

Under a fuel-neutral CO2 standard a new coal plant designed to capture about 60% of its CO2 would comply with the standard. The coal lobby will complain about the cost of carbon capture and sequestration (CCS) but that cost will not get lower if standards were set to ensure no new coal plants will ever have to employ CCS. And the bottom line is that today it is not the cost of CCS that is blocking new coal plants; it is the cost of plain old dirty coal plants compared to the alternatives that is shelving these proposals.

Of course, no one should be surprised that the coal lobby thinks the notion of a level playing field standard is the policy equivalent of the swine flu. But we dont build new power plants in order to prop up the coal industry. We want new power resources, not to help burn more coal, but to provide heat, light, comfort, convenience and to do so reliably and in a manner that does not send our kids to the emergency room with asthma attacks, our parents to an early death, or condemn our grandchildren to a planet with a climate so disrupted that their lives will be immeasurably less safe and enriching.

Despite the coal lobbys rhetoric, building new conventional coal plants is a bad economic bet for society as well as for individual investors. Even in countries where building a new coal plant appears to be cheaper than investing in cleaner energy, the International Energy Agency reports that such a path will produce huge net economic losses. IEA reports [cite to WEO2011] that for every dollar saved by investing in a dirtier resource before 2020, countries will wind up spending more than four dollars after 2020 to overcome the impact of those dirty investments.

So lets have the debate. The market has walked away from conventional coal plants. Should EPA try to hold back the tide? Should EPA set CO2 standards for new power plants that are twisted to make the coal industry happy? Or should EPA follow the law and good policy and set standards that provide a level playing field for coal and natural gas and avoid locking us into another round of new multi-billion dollar old coal technology that will cost us more and damage our health and the only climate we have?

What New Coal Plants?

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construction of new coal plants, if and when the private sector decides such plants are a better option than alternatives. No, such a standard would just provide a level playing field for the two leading fossil fuels in the power sector: coal and natural gas. (Such a rule would not be a truly level playing field for electric resource investments since it would still heavily favor fossil fuels over zero-emitting options like efficiency, renewables, or nuclear if the latter's many problems could be solved.)

Under a fuel-neutral CO2 standard a new coal plant designed to capture about 60% of its CO2 would comply with the standard. The coal lobby will complain about the cost of carbon capture and sequestration (CCS) but that cost will not get lower if standards were set to ensure no new coal plants will ever have to employ CCS. And the bottom line is that today it is not the cost of CCS that is blocking new coal plants; it is the cost of plain old dirty coal plants compared to the alternatives that is shelving these proposals.

Of course, no one should be surprised that the coal lobby thinks the notion of a level playing field standard is the policy equivalent of the swine flu. But we don't build new power plants in order to prop up the coal industry. We want new power resources, not to help burn more coal, but to provide heat, light, comfort, convenience and to do so reliably and in a manner that does not send our kids to the emergency room with asthma attacks, our parents to an early death, or condemn our grandchildren to a planet with a climate so disrupted that their lives will be immeasurably less safe and enriching.

Despite the coal lobby's rhetoric, building new conventional coal plants is a bad economic bet for society as well as for individual investors. Even in countries where building a new coal plant appears to be cheaper than investing in cleaner energy, the International Energy Agency reports that such a path will produce huge net economic losses. IEA reports [cite to WEO2011] that for every dollar "saved" by investing in a dirtier resource before 2020, countries will wind up spending more than four dollars after 2020 to overcome the impact of those dirty investments.

So let's have the debate. The market has walked away from conventional coal plants. Should EPA try to hold back the tide? Should EPA set CO2 standards for new power plants that are twisted to make the coal industry happy? Or should EPA follow the law and good policy and set standards that provide a level playing field for coal and natural gas and avoid locking us into another round of new multi-billion dollar old coal technology that will cost us more and damage our health and the only climate we have?

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Friday, February 3, 2012 4:24 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Fwd: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards

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Typed on tiny keyboard. Caveat lector.

Begin forwarded message:

From: "Doniger, David" <ddoniger@nrdc.org>
Date: February 3, 2012 12:59:38 PM EST
To: <clean@lists.usclimatenetwork.org>
Subject: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards
Reply-To: "Doniger, David" <ddoniger@nrdc.org>

http://switchboard.nrdc.org/blogs/ddoniger/toxic_trio_attacks_epas_carbon.html

Toxic Trio Attacks EPA's Carbon Pollution Safeguards

In their latest attack on vital clean air safeguards, three senior House Republicans are trying to stop the Environmental Protection Agency from doing its job under the Clean Air Act to protect Americans from dangerous carbon pollution from new power plants pollution that threatens our health and drives our increasingly extreme weather.

In a letter earlier this week, Energy and Commerce Committee chairman Fred Upton (R-MI) joined with two other friends of the big polluters, Joe Barton (R-TX) and Ed Whitefield (R-KY), to demand that the White House block those new power plant standards.

After years of delay, EPA is on the verge of issuing the first national limits on the carbon dioxide that will spew from the smokestacks of electric power plants to be built over the next decade. EPA is following the Clean Air Act passed by Congress,

of course and *two* Supreme Court decisions.

Carbon pollution threatens the health of Americans by causing more severe heat waves and contributing to more devastating floods, rising sea levels, poor air quality and many other health threats. Power plants are the nations biggest carbon polluters, and there are no national limits on that pollution.

Poll after poll confirms that the American people count on EPA to protect them from dangerous carbon pollution, dont trust polluters to police themselves, and dont buy the House Republicans claims that EPA safeguards kill jobs. (See here, here, here, and here.)

But thats not good enough for the toxic trio. These are the same guys who led last years unprecedented assault on the nations public health and pollution laws in the House of Representatives. They helped pushed 191 polluter-protection measures through the House last year. Fortunately, nearly all of them died in the Senate.

Their letter attempts to blame EPA for blocking construction of a hypothetical new generation of coal-burning and carbon-spewing power plants. Well, as my colleague David Hawkins puts it, What New Coal Plants? Citing forecasts from the Energy Information Administration and the private sector, Hawkins writes: Haven't they been paying attention? No one wants to build new coal plants. Except for a handful already underway, no more are planned for the foreseeable future. The future supply of electric power belongs to natural gas, wind power and other renewables, and greater energy efficiency in our homes, offices, and industries.

This blame-EPA-for-your-own-business-decisions game is nothing new. Just last week First Energy in Ohio announced that it will close some 50-year old coal-burning plants in September 2012. As NRDCs Henry Henderson explains, First Energy sought to blame the 2012 closures on EPAs new mercury standards even though it wouldnt have to meet those standards until *2015,* and even though it had idled some of those units more than a year ago.

Despite the trios claims, the standards EPA is expected to propose will not bar the construction of new coal plants. What they will do is set an emission rate performance standard (not a cap) that new coal plants must meet, based on what is technically feasible and economically reasonable. Such standards could and should provide the market with a genuine reason to use carbon capture and storage technology something lacking in todays policy environment. Unlike politicians and ideologues who blind themselves to the science, most power company executives and investors understand that they will need this technology if they are ever going to be able build coal plants again.

The Upton-Barton-Whitfield letter repeats the tired-out charge that EPA is engaged in a back door attempt to implement the climate and energy legislation that Congress failed to enact in 2010. They ignore the *existing* Clean Air Act, passed by Congress decades ago, which gave EPA the duty and the authority to tackle new

pollution threats as science identifies them. As the Supreme Court held in *Massachusetts v. EPA* in 2007, and again in *American Electric Power v. Connecticut* last year, it is already EPAs job to curb dangerous carbon pollution and protect our health and our climate under the Clean Air Act.

No matter how many times this group of angry lawmakers try to mislead the public with wild claims about EPA's standards, the people's response is the same: we believe in EPA, not you and your polluter friends.

David D. Doniger

Policy Director, Climate and Clean Air Program

Natural Resources Defense Council

Please note our new address:

1152 15th Street, NW, Suite 300

Washington, DC 20005

Phone: (202) 289-2403

Cell: (202) 321-3435

Fax: (202) 289-1060

ddoniger@nrdc.org

on the web at www.nrdc.org

read my blog: http://switchboard.nrdc.org/blogs/ddoniger/

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Friday, December 9, 2011 12:51 PM
To:	Michael Goo <Ex. 6 - Personal Privacy
Subject:	Inside epa

What I sent unattributed to inside epa in response to today's story
> "Flacks for the coal lobby are screaming about rumored content of a draft EPA rule for new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for a decade or more. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?"

What is the deal with the heat rate form for the std? Is that accurate? If so, it would not be possible for a coal unit with CCS to comply. I assume this part is wrong.

Sent from my iPad

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Tuesday, December 6, 2011 5:23 AM
To: Ex. 6 - Michael Goo
Subject: InsideEPA

Dawn Reeves at Inside EPA says the following:
"Also im writing this week that the nsps at the white house sets a standard at nat gas combined cycle, sending a signal of no new coal w/o igcc and ccs."

We are not commenting.

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Saturday, December 17, 2011 9:28 AM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	MATS

Hi Michael,

Was the rule in fact signed yesterday?

David

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Thursday, February 2, 2012 10:52 PM
To:	michael Goo Ex. 6 - Personal Privacy
Subject:	Re: stuff

We did a blog under Doniger's name that I think threads the needle

Sent from my iPad

On Feb 2, 2012, at 9:52 AM, "michael Goo" Ex. 6 - Personal Privacy wrote:

> although the cat is clearly out of the bag I would urge great caution in talking to anyone, especially press and the hill about the standard or the WP--any such talk is almost certainly going to be unhelpful as its proving to be in a number of unexpected quarters.....just an FYI---I know its not you but colleagues in the community.....
>
> **COMING FOR YOUR CARBON -** Top Energy and Commerce Republicans want the White House to pull back EPA's planned rulemaking on greenhouse gas emissions for new power plants, saying they worry the standards would require costly technologies like carbon capture and sequestration. "Such standards would be a back door cap-and-tax regime, circumventing the will of Congress and the American people," E&C Chairman Fred Upton and Reps. Joe Barton and Ed Whitfield wrote in a letter today to the White House. The letter: http://bit.ly/yEvHah.
> **WHO'S COUNTING?** The greenhouse gas new source performance standards have been at OMB since Nov. 7, meaning that today marks day 87 of the 90 day review period. The EPA originally agreed, in response to a lawsuit, to propose the rule by July 2011, but now remains in settlement (re)negotiations.

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Wednesday, November 23, 2011 2:52 PM
To: goo.michael@epa.gov; Ex. 6 - Michael Goo
Subject: Returned your call

Ex. 6 - Personal Privacy

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Friday, November 18, 2011 4:09 PM
To:	Michael Goo; Ex. 6 - Personal Privacy
Subject:	draft 111(d) specs
Attach:	Specs nov 18 2011.docx

FYI

Draft 111(d) GHG Specs

Covered sources: all existing fossil units

Form of guideline/standard: lb/MWh annual emission rate

Obligation: fossil units must achieve an improvement in CO2 emission rate (lbs/MWh) relative to national baseline (2008-2010) emission rates for coal, gas, oil. Broad emission-rate averaging and crediting for zero-carbon electric service resources allowed.

Schedule: phase 1 by [2017]; phase 2 by 2020

Degree of improvement from baseline emission rate:

Coal: 5% by [2017]; 15% by 2020

Gas: 2.5% by [2017]; 5% by 2020

[oil -tbd]

Compliance mechanism/state equivalency:

EPA guideline would --

provide for compliance determinations based on a state-wide-fossil-fleet average basis (dispatch shifts to less carbon intensive fuel would be an eligible compliance technique);

count incremental DSM, DR, and zero-carbon resource generation in determining compliance with the target emission rate improvement;

permit interstate emission rate averaging within the ISO/RTO region (or at the state's option, nationally);

allow banking.

In the case of states with caps or similar measures, states could demonstrate equivalency by showing that the improvement in covered-sources' emission rate (including consideration of creditable incremental zero-carbon electric power and DSM/DR resources) would achieve the above required amounts of improvement.

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Friday, November 18, 2011 11:26 AM
To: Michael Goo; Ex. 6 - Personal Privacy
Subject: link to Jackson comment

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http://www.energynow.com/video/2011/11/17/epa-administrator-lisa-jackson-pollution-regulations

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Tuesday, November 22, 2011 6:01 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: my response to the WSJ

The Journal accuses EPA of "industrial planning" because of its adoption of rules to reduce deadly pollution from dirty coal plants [cite]. Apparently, the writer played hooky from the Econ 101 class on externalities. Cutting harmful pollution from old coal plants does not make them "artificially more expensive." To the contrary, the coddling of these polluters by the prior administration made their power artificially and fraudulently appear to be cheap. The costs of that pollution are real and by all analyses are many times larger than the costs of cleaning up these plants. How about taking the ideological blinders off and acknowledging that dirty does not mean better?

From:	Lashof, Dan <dlashof@nrdc.org>
Sent:	Tuesday, June 28, 2011 2:40 PM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	FW: Maybe we are winning after all
Attach:	electric sector emission rate trend.xlsx

FYI---

From: Lashof, Dan
Sent: Tuesday, June 28, 2011 2:38 PM
To: Climate Center Staff
Subject: Maybe we are winning after all
Importance: High

Please see the attached presentation which is a draft attempt to frame our climate advocacy in the post-Waxman-Markey world.

The bottom line on climate is that the president has it within his power to make significant reductions to the two biggest sources of global warming pollution: Power plants and cars. Together these two rules cover about 60% of U.S. CO2 emissions. Both rules (NSPS for power plants, GO60 for cars) are being drafted right now and will be proposed in September and finalized next Spring.

Right now the narrative about Obama and Climate is that he failed to deliver comprehensive legislation and he failed to deliver a strong agreement in Copenhagen (e.g. Al Gore in Rolling Stone). Neither of those fora were entirely within his control. These rules are. The climate legacy of his first term can still be very positive if he delivers on these two rules and defends them. All he needs to do is adopt rules that continue the recent rate of progress in these two sectors.

The story on actual emissions is actually much more positive than people realize. Discounting 2009, which was a deep recession year, and focusing on 2010 compared to 2005, GDP in 2010 was 5% higher than 2005 and overall U.S. emissions were 6% lower. If we keep up that rate of progress in absolute emissions, in 2020 emissions would be 18% below 2005 levels, which is

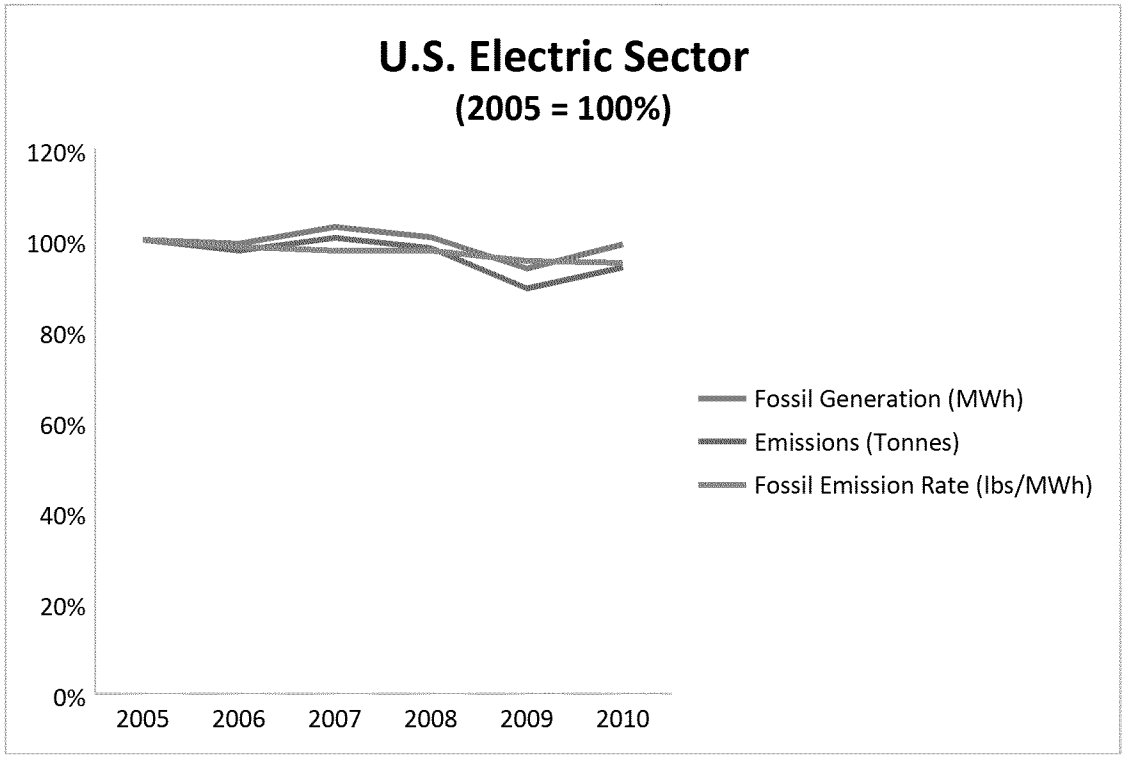
actually slightly better than the target the President endorsed in Copenhagen.

For the power sector in particular, total emissions in 2010 were down 6% from 2005 levels, while total generation was up 2% and fossil generation was down 1%, resulting in a 5% reduction in the fossil fuel emission rate. (see attached).

For cars, the 2012-2016 standards already in place will increase fuel economy by 5%/year and the rumored administration proposal is to continue that rate of progress until 2025 (provided we can avoid debilitating loopholes).

-Dan

	Fossil Gen Million kWh	Emissions MMT	Rate lbs/MWh	Fossil Gen Normalized to 2005	Emissions	Rate
2005	2,909,522	2417	1,832	100%	100%	100%
2006	2,885,295	2359	1,803	99%	98%	98%
2007	2,992,238	2426	1,788	103%	100%	98%
2008	2,926,731	2374	1,788	101%	98%	98%
2009	2,726,452	2159	1,746	94%	89%	95%
2010	2,880,683	2271	1,738	99%	94%	95%



Source: EIA Monthly Energy Review

From:	Lashof, Dan <dlashof@nrdc.org>
Sent:	Wednesday, June 8, 2011 6:40 PM
To:	Ex. 6 - Michael Goo
Cc:	Hawkins, Dave <dhawkins@nrdc.org>; Doniger, David <ddoniger@nrdc.org>
Subject:	Retire v Co-fire
Attach:	retire v cofire.docx

Michael—

This is a pretty basic analysis, but it makes me even more concerned that a coal-only standard is not likely to achieve significant emission reductions. I'm sending this only to you, Hawkins and Doniger. Attached and pasted below.

-Dan

Retire v Co-fire

-

Start with a moderately inefficient coal plant.

Heat rate: 11,000 Btu/kWh

Emission rate: 2286 lbs/MWh (at national average carbon content of 25.7 kgC/MBtu)

Fuel Cost: $23.21/MWh (at EIA projected coal cost of $2.11/MBtu in 2015)

Assume target emission rate is 2100 lbs/MWh.

Option 1: Retire coal plant and replace with efficient natural gas combined cycle (NGCC)

NGCC heat rate: 7200 Btu/KWh

NGCC emission rate: 842 lbs/MWh

Fuel cost operating on gas: $33.62/MWh (at EIA projected gas cost of $4.67/MBtu)

Option 2: Co-fire with natural gas in existing boiler, heat rate remains 11,000 Btu/KWh

Emission rate with gas: 1287 lbs/Mbtu

Co-firing percentage required to meet target: 18.6% gas

Fuel cost operating on gas: $51.37/MWh (at EIA projected gas cost of $4.67/MBtu)

Average fuel cost: $28.44/MWh

Observations:

Even though using gas in an NGCC is much more efficient than co-firing gas in the existing coal boiler, the average fuel costs for operating the coal plant co-fired with gas to meet the standard are considerably lower than the fuel costs to run an efficient NGCC (by $5/MWh). That means that, all other things being equal, it's cheaper to keep the coal plant online and co-fire with gas to meet the standard rather than to retire the coal plant and replace all of its output with increased utilization of NGCC capacity. The comparison is even more favorable to retaining the coal plant if a new gas plant would have to be built to replace the capacity.

In fact, the emission rate standard would have to be lowered by 17% to 1915 lbs/MWh, requiring 37% gas co-firing, to bring the average fuel costs of the coal plant up to $33.7/MWh, the level required to make it cheaper to retire the coal plant and operate the NGCC, rather than co-fire (see below). It's hard to see how EPA could defend such a standard, which raises the fuel costs of the affected units by almost 50%, or over $10/MWh [particularly when the same reduction could be achieved by re-dispatching 26% of the coal plants MWhs to NGCC, at an incremental cost of less than $3/MWh if the standard were structured so that re-dispatch can count toward compliance.]

Assume target emission rate is 1915 lbs/MWh.

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NGCC heat rate: 7200 Btu/KWh

NGCC emission rate: 842 lbs/MWh

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Emission rate with gas: 1287 lbs/Mbtu

Co-firing percentage required to meet target: 37.1% gas

Fuel cost operating on gas: $51.37/MWh (at EIA projected gas cost of $4.67/MBtu)

Average fuel cost: $33.66/MWh

Reduce utilization of coal plant, replace MWhs with efficient gas plant

NGCC heat rate: 7200 Btu/KWh

NGCC emission rate: 842 lbs/MWh

Re-dispatch percentage required to meet target: 25.7% gas

Fuel cost operating on gas: $33.62/MWh

Average fuel cost: $25.88

Daniel A. Lashof, Ph.D.

Director, NRDC Climate Center

202-289-6868

Retire v Cofire

Start with a moderately inefficient coal plant.
Heat rate: 11,000 Btu/kWh
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Average fuel cost: $25.88

From:	John Coequyt <John.Coequyt@sierraclub.org>
Sent:	Tuesday, May 31, 2011 2:33 PM
To:	michael Goo Ex. 6 - Personal Privacy
Subject:	Memo
Attach:	111d Memo 5.30.doc

Michael:

First, you might want to change your personal email address, now that you have new job and all.

Attached is a memo I didn't want to send in public.

Standards of Performance for Existing Sources

Issue: Must a standard of performance under Clean Air Act section 111(d) be achievable by every source in a given category?

Analysis:

The definition of a "standard of performance" in section 111(a)(1) requires that the standard be "achievable" based on the best "demonstrated" "systems of emission reduction." It provides:

> a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

This definition applies to standards for both new and existing sources. *See* 111(b)(1)(B), 111(d)(1). The statute does not define "achievable," nor does it state that every existing source in the category must be able to achieve the standard. The term "achievable" is ambiguous and EPA therefore has discretion to adopt its own reasonable interpretation.

The case law makes it clear that when establishing performance standards under section 111 for a given source category, EPA need not set standards that are achievable by every existing source in that category. Performance standards can be technology-forcing:

> Recognizing that the Clean Air Act is a technology-forcing statute, we believe EPA does have authority to hold the industry to a standard of improved design and operational advances, so long as there is substantial evidence that such improvements are feasible and will produce the improved performance necessary to meet the standard.

Sierra Club .v Costle, 657 F.2d 298, 364 (D.C. Cir. 1981)(footnote omitted). In fact, for new sources, the D.C. Circuit has held that the standard need not be achievable by *any* existing source. It can go beyond the current state of the art as long as it is a reasonable projection of what will be achievable based on existing technology. *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 391 (D.C. Cir. 1973). The court held:

> We begin by rejecting the suggestion of the cement manufacturers that the Act's requirement that emission limitations be "adequately demonstrated" necessarily implies that any cement plant now in existence be able to meet the proposed standards. Section 111 looks toward what

> may fairly be projected for the regulated future, rather than the state of the art at present, since it is addressed to standards for new plants-old stationary source pollution being controlled through other regulatory authority.

Id. The court's reasoning distinguishes new and old sources, relying on section 111's focus on new sources for its conclusion that existing sources do not necessarily need to be able to meet the standard.

For existing sources, unlike new sources, it obviously would not be a reasonable interpretation of the statute for EPA to set a standard that no existing plant can achieve. But EPA does have discretion to set a standard under 111(d) that (1) no existing plant is currently achieving, and (2) not every existing plant is capable of achieving. That discretion arises from the ambiguity of the "standard of performance" definition and the language of section 111(d).

Section 111(d) contemplates that the states will implement performance standards for existing sources, and that "[r]egulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source . . . to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies." The statute does not define "remaining useful life," so EPA has discretion to adopt a reasonable definition. That definition need not be based solely on age; it can also consider factors such as efficiency, capacity factor, investment in pollution controls, etc.

By allowing consideration of the remaining useful life of the existing source, the statute anticipates that some sources will not ultimately meet the standard before they reach the end of their remaining useful life and shut down. EPA has already interpreted 111(d) to authorize states to establish compliance schedules for sources to achieve the standard. 40 CFR 60.24. If states are to phase in compliance for particular sources on a schedule that takes into consideration their remaining useful life "among other factors," it is a simple matter – and perfectly acceptable under the statute – to allow plants nearing the end of their remaining useful life to operate without achieving the standard and then require them to shut down at the end of that remaining useful life. EPA has already acknowledged this concept in applying the "remaining useful life" provision in the regional haze context. *See* 40 CFR pt. 51, App. Y, IV.D.STEP 4.k.2(2) (if decision by the facility to shut down affects the BART determination "this date should be assured by a federally- or State-enforceable restriction preventing further operation"); *see also* 42 U.S.C. §7491(g)(2) (statutory BART factors include "remaining useful life of the source"). EPA can therefore establish a performance standard for existing plants that is not achievable by any plant nearing the end of its "remaining useful life" as defined by EPA.

From: Hawkins, Dave <dhawkins@nrdc.org>
Sent: Friday, April 22, 2011 4:43 PM
To: Michael Goo Ex. 6 - Personal Privacy
Subject: ICF materials

From:	Hawkins, Dave <dhawkins@nrdc.org>
Sent:	Saturday, April 9, 2011 8:55 AM
To:	Michael Goo Ex. 6 - Personal Privacy
Subject:	update

I got the filing of this document delayed until CR is done.

From: Doniger, David <ddoniger@nrdc.org>
Sent: Monday, April 11, 2011 4:16 PM
To: Ex. 6 - Michael Goo
Subject: WRI draft

Let me know what you think.

David D. Doniger

Policy Director, Climate Center

Natural Resources Defense Council

1200 New York Ave., NW

Washington, DC 20005

Phone: (202) 289-2403

Cell: (202) 321-3435

Fax: (202) 789-0859

ddoniger@nrdc.org

on the web at www.nrdc.org

read my blog: http://switchboard.nrdc.org/blogs/ddoniger/

From:	David Hawkins Ex. 6 - Personal Privacy
Sent:	Friday, August 12, 2011 4:02 PM
To:	Ex. 6 - Michael Goo
Subject:	fyi

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what I sent to Todd

Hi Todd,

I hope you are well. I just wanted to put on your radar screen the upcoming proposed rules to set the first GHG limits for fossil power plants under the Clean Air Act. These rules along with the EPA rules for vehicles will determine how close the U.S. comes to using its existing authority to meet the President*s commitments to reduce U.S. emissions.

EPA is currently scheduled to publish proposed rules at the end of September and I expect that the inter-agency review process on draft rules will begin soon.

I anticipate that these rules will be controversial and that the White House will be hearing many voices of opposition to a rule that attempts to achieve any significant reductions from this important source of emissions. I do hope the State Department will a voice that stresses the importance of doing something meaningful to bring down emissions from this sector. There is no way for the U.S. to come close to the President*s commitment if this sector is given a pass. I hope that State will be able to make the case in the administration deliberations that such an outcome would be very harmful to our interests.

I understand you are traveling but would love to discuss this with you at your convenience.

Thanks

David

From: Ex. 6 - Michael Goo
Sent: Tuesday, August 20, 2013 9:19 AM
To: goo.michael@epa.gov
Subject: FW: Sunstein on power plants

Sent from Yahoo! Mail for
iPhone

From: Doniger, David <ddoniger@nrdc.org>;
To: Michael Goo Ex. 6 - Personal Privacy
Subject: Sunstein on power plants
Sent: Sun, Nov 11, 2012 11:32:53 AM

Michael,

Take a look at this. Self-serving, but helpful, I think. I intend to brief him confidentially on our report, unless you think that's a mistake.

http://www.nytimes.com/2012/11/11/opinion/sunday/climate-change-lessons-from-ronald-reagan.html?hp&_r=0

November 10, 2012

Climate Change: Lessons From Ronald Reagan

By CASS R. SUNSTEIN

THE re-election of President Obama, preceded by the extraordinary damage done by Hurricane Sandy, raises a critical question: In the coming years, might it be possible for the United States to take significant steps to reduce the risks associated with climate change?

A crucial decision during Ronald Reagan's second term suggests that the answer may well be yes. The Reagan administration was generally skeptical about costly environmental rules, but with respect to protection of the ozone layer, Reagan was an environmentalist hero. Under his leadership, the United States became the prime mover behind the Montreal Protocol, which required the phasing out of ozone-depleting chemicals.

There is a real irony here. Republicans and conservatives had ridiculed scientists who expressed concern about the destruction of

the ozone layer. How did Ronald Reagan, of all people, come to favor aggressive regulatory steps and lead the world toward a strong and historic international agreement?

A large part of the answer lies in a tool disliked by many progressives but embraced by Reagan (and Mr. Obama): cost-benefit analysis. Reagan's economists found that the costs of phasing out ozone-depleting chemicals were a lot lower than the costs of not doing so — largely measured in terms of avoiding cancers that would otherwise occur. Presented with that analysis, Reagan decided that the issue was pretty clear.

Much the same can be said about climate change. Recent reports suggest that the economic cost of Hurricane Sandy could reach $50 billion and that in the current quarter, the hurricane could remove as much as half a percentage point from the nation's economic growth. The cost of that single hurricane may well be more than five times greater than that of a usual full year's worth of the most expensive regulations, which ordinarily cost well under $10 billion annually. True, scientists cannot attribute any particular hurricane to greenhouse gas emissions, but climate change is increasing the risk of costly harm from hurricanes and other natural disasters. Economists of diverse viewpoints concur that if the international community entered into a sensible agreement to reduce greenhouse gas emissions, the economic benefits would greatly outweigh the costs.

Skeptics have rightly observed that even aggressive regulatory steps by the United States cannot stop climate change. Greenhouse gases stay in the atmosphere for decades, and many nations, especially in the developing world, are contributing growing levels of emissions. For this reason, the unilateral actions of any country will not do what must be done to reduce anticipated warming and the resulting harms. Nonetheless, cost-effective reductions from the United States would help, both in themselves and because they should spur technological changes and regulatory initiatives from other nations.

For the United States, some of the best recent steps serve to save money, promote energy security and reduce air pollution. A good model is provided by rules from the Department of Transportation and the Environmental Protection Agency, widely supported by the automobile industry, which will increase the fuel economy of cars to more than 54 miles per gallon by 2025.

The fuel economy rules will eventually save consumers more than $1.7 trillion, cut United States oil consumption by 12 billion barrels and reduce greenhouse gas emissions by six billion metric tons — more than the total amount of carbon dioxide emitted by the United States in 2010. The monetary benefits of these rules exceed the monetary costs by billions of dollars annually.

In a similar vein, recent rules from the Department of Energy are requiring greater energy efficiency from appliances like refrigerators, washing machines and small motors. For these rules as well, the monetary benefits dwarf the costs, and they include large savings to consumers as well as pollution reductions. There is a lot more to achieve in the area of energy efficiency, especially as technologies advance and continue to transform the once-impossible into the eminently doable.

The electricity sector is responsible for more than a third of greenhouse gas emissions in the United States. In this domain, any regulations must be carefully devised, as they were in the case of fuel economy, to ensure that they do not impose unjustified costs, especially in an economically difficult period. But just as in that case, it should be possible to work with affected companies to identify flexible and cost-conscious approaches, producing reductions while minimizing regulatory burdens.

As in the case of the Montreal Protocol, an effective response to climate change requires many nations to act. China is the biggest greenhouse gas emitter on the planet, and it must become a leader in international negotiations, not an obstacle. But smart initiatives from the United States may well be an indispensable precondition for international efforts.

For those who seek to reduce the risks associated with climate change, it is ironic but true that the best precedent comes from a conservative icon. The big question now is whether today's Republicans will follow Reagan's example.

Cass R. Sunstein is a professor at Harvard Law School and a former administrator of the White House Office of Information and Regulatory Affairs.

David D. Doniger

Policy Director, Climate and Clean Air Program

Natural Resources Defense Council

1152 15th Street, NW, Suite 300

Washington, DC 20005

Phone: (202) 289-2403

Cell: (202) 321-3435

Fax: (202) 289-1060

ddoniger@nrdc.org

on the web at www.nrdc.org

read my blog: http://switchboard.nrdc.org/blogs/ddoniger/

From: Michael Goo Ex. 6 - Personal Privacy
Sent: Saturday, October 26, 2013 2:17 PM
To: John Coequyt <john.coequyt@sierraclub.org>
Subject: Fwd: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

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Sent from my iPhone

Begin forwarded message:

From: "Goo, Michael" <Goo.Michael@epa.gov>
Date: October 26, 2013, 2:16:23 PM EDT
To: Ex. 6 - Michael Goo
Subject: Fw: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

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From: Rivas-Vazquez, Victoria
Sent: Friday, October 25, 2013 5:21:09 PM
To: Assistant Administrators; Assistant Regional Administrator; DAA-Career; Regional Administrators; DRA; Associate Administrators; Deputy Associate Administrators; Deputy Administrator; Feldt, Lisa; Ganesan, Arvin; KeyesFleming, Gwen; Reeder, John; Bittleman, Sarah; Fritz, Matthew; Rupp, Mark
Subject: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

Dear Colleagues:

I am writing to announce that Michael Goo will be leaving his current position as Associate Administrator in the Office of Policy to pursue an opportunity in the Administration at the Department of Energy (DOE). As you know, Michael has been a key member of our management team in the Administrator's Office over the last three years, and I would like to take this opportunity to share my gratitude for his leadership and work on behalf of the Agency. Michael directed the Office of Policy (OP) during a period with a large number of incredibly important rulemakings. His strategic policy advice, as well as his oversight of these regulations throughout the OMB review process was essential to our success. Everyone knew that they could always count on Michael to know where every regulation

was in the ADP process; to identify the current outstanding issues; and to provide options for pathways to resolution. Key regulations for carbon pollution, waste, air toxics, and water passed through OP where Michael provided key leadership to ensure that the rules we issued were coordinated with each other in a commonsense way. He also led the implementation of Executive Order 13563 by developing a high profile plan for a retrospective analysis of existing rules to find places where we could enhance, revise, repeal or amend existing regulations.

Michael has been a core part of Agency-wide collaborative efforts to develop tools and approaches to evaluate environmental justice impacts, consistent with EPA's Plan EJ 2014. During a period of intense scrutiny, he has ensured that EPA's economic analysis have been strong and consistent and that we are constantly developing approaches to improving them. Under his guidance, the Executive Management Council was enhanced and continues to serve as an important forum and resource for the Agency's career senior leadership. Also, Michael has led the Office of Policy's work on a myriad of other cross-cutting issues, including sustainability, climate adaptation, and smart growth.

While Michael maybe assuming new duties at another agency, EPA's interests will remain a key focus of his work at DOE. In fact, he will remain in close contact with several of us as we continue to implement the President's Climate Action Plan and the Quadrennial Energy Review. Please join me in thanking Michael for his work at EPA and wishing him continued success.

Shannon Kenny, the Office of Policy's Principal Deputy Associate Administrator, will assume the role of Acting Associate Administrator in the interim. Shannon has been with EPA since 2000. Throughout her professional career, Shannon has focused on environmental, energy and manufacturing issues, which includes her work on climate change legislation for three years on Capitol Hill. She holds a Bachelor of Science in Zoology from the University of Texas at Austin and a Master in Environmental Management degree from Duke University.

Sincerely,

Gwen Keyes Fleming

Chief-of-Staff

From: Michael Goo [Ex. 6 - Personal Privacy]
Sent: Saturday, October 26, 2013 12:52 PM
To: John Coequyt <john.coequyt@sierraclub.org>
Subject: Fwd: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

---

Pls strip all identifying info if you circulate. Thx.

Sent from my iPhone

Begin forwarded message:

From: "Goo, Michael" <Goo.Michael@epa.gov>
Date: October 26, 2013, 12:00:53 PM EDT
To: [Ex. 6 - Debbie Reed]
[Ex. 6 - Michael Goo]
Subject: Fw: On Behalf of the Chief-of-Staff: Office of Policy - Personnel Announcements

Associate

From: Michael Goo Ex. 6 - Personal Privacy
Sent: Thursday, November 7, 2013 1:46 PM
To: Hawkins, Dave <dhawkins@nrdc.org>
Subject: Re: Section 115 article

Thanks. Will do.

Sent from my iPhone

On Nov 6, 2013, at 1:09 PM, "Hawkins, Dave" <dhawkins@nrdc.org> wrote:

> FYI
>
> Send me your new work email when you have it.
>
> David
>
> <ELI 115 Forum.pdf>

From:	Michael Goo Ex. 6 - Personal Privacy
Sent:	Tuesday, October 15, 2013 6:00 PM
To:	John Coequyt <john.coequyt@sierraclub.org>
Subject:	Re: Sup Ct Order

Thanks.

Sent from my iPhone

On Oct 15, 2013, at 5:06 PM, John Coequyt <john.coequyt@sierraclub.org> wrote:

John Coequyt
202.669.7060

Begin forwarded message:

From: Pat Gallagher <pat.gallagher@sierraclub.org>
Date: October 15, 2013 at 3:58:31 PM EDT
To: Verena Owen Ex. 6 - Personal Privacy
Cc: Melinda Pierce <melinda.pierce@sierraclub.org>, "#Strategy-Team" <strategy-team-list@sierraclub.org>
Subject: Sup Ct Order

Folks - here you go. Please keep this internal for now, thanks.
OVERVIEW

The Supreme Court today denied industry and state petitions asking it to overturn its seminal decision in Massachusetts v. EPA. The Court refused to hear industry challenges to EPA'S finding that greenhouse gases endanger public health and welfare, and refused to hear challenges to the standards limiting greenhouse gas pollution from cars and trucks. The Court decided to entertain just one narrow question arising out of EPA's first set of greenhouse gas regulations: whether the regulation of cars and trucks automatically triggered the regulation of large stationary sources such as coal plants and refineries under the preconstruction permitting program in section 165 of the Clean Air Act (also known as the PSD program). The resolution of this question should have little to no practical effect on current efforts to control greenhouse gases from large stationary sources under other parts of the Clean Air Act (or state laws), including EPA's recently proposed new source performance standards under section

111 of the Act.

BACKGROUND

To understand the ramifications of today's Supreme Court order, one must understand some basic structure of the Clean Air Act (the "Act"). Section 202 of the Act governs motor vehicles, and was the basis of the Court's decision in Massachusetts v. EPA. In Massachusetts v. EPA, the Court first found that greenhouse gases are "air pollutants" under the broad definition in section 302 that applies throughout the Act. The Court then held that section 202 gives EPA full authority to find that greenhouse gases endanger public health and welfare and to regulate tailpipe emissions of greenhouse gases. EPA carried out this authority with its endangerment finding and joint rule with the Department of Transportation setting limits on car and light-duty truck greenhouse gas pollution. The Supreme Court today let these two actions stand.

Section 165 of the Act contains the so-called "Prevention of Significant Deterioration" permitting provisions for large stationary sources of air pollution, such as coal plants and refineries. Section 165 requires such sources to obtain detailed permits with emission limits for all regulated pollutants, including soot and smog-forming emissions. Section 165 requires pollution sources to ensure that they meet emission limits reflecting the "Best Available Control Technology." Generally speaking, section 165 applies to large pollution sources which are undergoing new construction or modification.

When EPA took action on cars and trucks, the agency relied on its longstanding interpretation of the Act and decided that the regulation of greenhouse gases in one part of the Act, section 202, automatically triggered regulation under the PSD permitting program in section 165. This view is logical, and the D.C. Circuit Court of Appeals held that it is compelled by the plain language of the Act, in part because the term "air pollutant" is very broadly defined and cross-referenced throughout the Act to cover all types of air pollution. However, industry challenged EPA's "automatic trigger" view and argued that regulation under section 165 is not automatic, and requires separate agency findings or actions, such as the establishment of ambient air quality standards for greenhouse gases.

Section 111 of the Act gives EPA independent authority to establish performance standards for new sources of air pollution. This provision forms the basis of EPA's recently re-proposed new source performance standards for fossil-fuel fired electric generating units, e.g. coal, gas and oil power plants. Section 111 is not at issue in the Supreme Court and should remain unaffected by the Court's ultimate ruling. This is true for several reasons: EPA is separately making findings under section 111 that fossil-fuel power plants may reasonably be anticipated to endanger public health and welfare; and section 111 sets nationally uniform performance standards by category of polluter, e.g. steel mills, chemical plants, and now coal plants. None of this is jeopardized by today's Supreme Court order.

So what is the worst-case scenario of an eventual Supreme Court ruling ?
Based on the precise question the Court is considering, it could decide that greenhouse gas emissions do not trigger PSD permitting requirements under section 165 for stationary sources. However, the Court may still decide that when a stationary source is subject to section 165 permitting for other pollutants such as smog and soot, it must also control greenhouse gases, even if its greenhouse gas emissions do not independently trigger permitting requirements. Since greenhouse gas pollution is typically accompanied by soot or smog-forming pollution, controls on all pollutants, including greenhouse gases, would still be required in this scenario. Moreover, new fossil-fuel power plants will still have to meet the new source performance standards EPA is now developing under section 111 of the Act, regardless of what happens to section 165. Ultimately, as EPA and states begin to regulate additional large categories of pollution sources under section 111 and other authorities (e.g. California's AB 32), any gaps in permitting will be closed, and large sources of greenhouse gases will be controlled.

On Tue, Oct 15, 2013 at 12:40 PM, Verena Owen Ex. 6 - Personal Privacy wrote:

> can we have some more details about the Supreme Court review of green house gas rule?
>
> On Tue, Oct 15, 2013 at 1:57 PM, Melinda Pierce <melinda.pierce@sierraclub.org> wrote:
>
> > I forgot that Maryanne is off today. There a no DC updates to share. Please share any updates or raise any questions via email today.
> > Implementation Call will go on as scheduled tomorrow
> >
> > --
> > Melinda Pierce
> > Deputy Director, Federal Policy
> > Sierra Club
> >
> > 202-675-7912 (o)
> > 202-544-2975 (c)
> >
> > To unsubscribe from this group and stop receiving emails from it, send a n email to strategy-team-list+unsubscribe@sierraclub.org.

--

Pat Gallagher
Legal Director
Sierra Club
85 Second Street
San Francisco, CA 94105
(415) 977-5709
(415) 977-5793
pat.gallagher@sierraclub.org

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:10 PM
To:	goo.michael@epa.gov
Subject:	Fw: CCS projects

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: "goo.michael@epa.gov" <goo.michael@epa.gov>
Sent: Thursday, May 9, 2013 5:00 PM
Subject: Fw: CCS projects

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Wednesday, October 26, 2011 8:15 PM
Subject: CCS projects

Here is info on one of the projects the one in Idaho. It has a CO2 limit in its permit. It also appears that it is no longer an EGU.

http://www.martenlaw.com/newsletter/20091214-permit-with-enforceable-co2-limits

First State Air Permit With Enforceable CO2 Limits Issued For Idaho Coal-Fueled Fertilizer Plant

By Svend Brandt-Erichsen
December 14, 2009
A proposed Idaho plant that will gasify coal as a feedstock for fertilizer has become the first coal-fueled facility in the U.S. to accept enforceable limits on carbon dioxide (CO2) emissions.[1] The limits are premised on capture and sequestration of 58 percent of the plant s CO2 output, reducing its emissions to that of a natural gas-supplied facility. The project proponent accepted the CO2 limits as part of a settlement with the Sierra Club and the Idaho Conservation League The proposed plant is to be located southwest of Pocatello, Idaho.[2] The State of Idaho does not regulate CO2 as a pollutant under its air laws, and has been careful to state that the limits voluntarily assumed by the project will not be considered binding on other Idaho facilities.[3] Nonetheless, if EPA proceeds with proposed regulatory actions that bring CO2 emissions within the Clean Air Act s permitting requirements, and this project is constructed and implements carbon capture and sequestration as planned, it will set a technology standard that will be relevant to future project permitting.

The project, known as the Power County Advanced Energy Center and being developed by Southeast Idaho Energy, LLC,[4] is designed to gasify 2,000 to 2,300 tons per day of coal and petcoke. The resulting synthesis gas would be used to manufacture ammonia, which would then be used to produce nitrogen-based fertilizers.[5] Natural gas is commonly used as a fertilizer feedstock, and this apparently provides the rationale for reducing CO2 emissions from the plant to roughly the equivalent of what would be emitted by a similar-sized fertilizer plant supplied by natural gas.[6] The plant developer plans to capture at least 58 percent of the CO2 that otherwise would be emitted by the plant, and sequester it in oil fields in Southwestern Wyoming, approximately 80 miles away.[7]

Background on Power County Advanced Energy Center

The Idaho project was first proposed in 2005 as a 520 megawatt Integrated Gasification Combined Cycle (IGCC) power plant. In 2007, the project was reconfigured as a fertilizer and synthetic diesel fuel plant, with feedstocks to be supplied through coal gasification.[8]In 2008, the scope of the project was limited to production of fertilizer products and elemental sulfur, still based upon gasified coal.[9]

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:28 PM
To:	goo.michael@epa.gov
Subject:	Fw: CCS projects

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Wednesday, October 26, 2011 8:15 PM
Subject: CCS projects

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From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Monday, August 19, 2013 2:10 PM
To:	goo.michael@epa.gov
Subject:	Fw: Cass Sunstein law review article

----- Forwarded Message -----
From: Philip Goo [Ex. 6 - Personal Privacy]
To [Ex. 6 - Michael Goo]
Sent: Tuesday, April 9, 2013 10:48 PM
Subject: Cass Sunstein law review article

--
Philip M. Goo, Esq.
Law Office of Philip M. Goo, PLLC
1377 K St SE Unit 2
Washington, DC 20003
Tel.: 404.583.9451
E-mail: [Ex. 6 - Personal Privacy]
Counsel for the Sierra Club

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:23 PM
To:	goo.michael@epa.gov
Subject:	Fw: E&E: Michael Goo chosen as top policy official

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Thursday, January 20, 2011 5:53 PM
Subject: FW: E&E: Michael Goo chosen as top policy official

Here is the story by the guy who called me. I told him I was not aware the position had been decided on. Hence the "wherever he is" comment. Hope it is not the kiss of death.
d

----- Original Message -----
From: uscan-talk-request@lists.usclimatenetwork.org <uscan-talk-request@lists.usclimatenetwork.org>
To: uscan-talk@lists.usclimatenetwork.org <uscan-talk@lists.usclimatenetwork.org>
Sent: Thu Jan 20 14:23:03 2011
Subject: [uscan-talk] E&E: Michael Goo chosen as top policy official

Congrats to Michael! No one better for the "hot seat" at EPA :)

Fred

Hill veteran chosen as top policy official (01/20/2011)

Gabriel Nelson, E&E reporter

As the Obama administration prepares to roll out new climate regulations and braces for a fight with Republicans in Congress, U.S. EPA has hired a veteran Democratic congressional staffer and climate change expert to lead its policy office, a top agency official said today.

The agency chose Michael Goo, who was most recently the staff director of the now-defunct House Select Committee on Energy Independence and Global Warming, said Al McGartland, director of EPA's National Center

for Environmental Economics. McGartland made the comments during a public meeting of the center's scientific advisory board.

Before joining the global warming panel, Goo served as the Natural Resources Defense Council's climate legislative director and worked for two congressional panels with jurisdiction over climate bills -- the Senate Environment and Public Works Committee and the House Energy and Commerce Committee.

Forced to find a new job after the incoming Republican leadership of the House disbanded the global warming panel, Goo is set to start at the end of the month, said McGartland, whose center is overseen by the policy office.

The head of the policy office is tasked with advising EPA Administrator Lisa Jackson on some of the thorniest questions facing the agency, such as its emerging climate program.

Now that the agency is expected to spend the next two years playing defense against congressional efforts to stop its greenhouse gas regulations, the new hire will allow EPA to expand its knowledge of the landscape on Capitol Hill, said Eric Washburn, who was staff director of the Senate Environment and Public Works Committee while Senate Majority Leader Harry Reid (D-Nev.) was chairman.

"If you look at the fact that Congress is not expected to pass any climate change legislation this Congress, the whole climate change battlefront now moves to EPA and the series of rules that it's going to be putting out in the next months and years," said Washburn, who is now a partner at BlueWater Strategies LLC. "They probably decided that they needed someone not only with substantive knowledge of policy but his political experience and his understanding of Congress, because the agency is now going to face months and months and months of oversight hearings."

Goo is also an expert on cap and trade, which could signal an interest in that type of market-based program.

Those sort of issues will be key as the agency prepares to finalize new performance standards for power plants and refineries under the Clean Air Act. The rules, required under a recent settlement with states and environmental groups, will set limits on greenhouse gas emissions from both new and existing power plants and refineries.

An agency spokesman would not confirm or deny McGartland's statements.

Goo would replace Louise Wise, a career staffer who became acting

associate administrator of the policy office after the departure of Lisa Heinzerling, an environmental law professor at Georgetown University. Heinzerling returned to academia last month after two years at EPA.

News of the hire was praised by David Hawkins, director of the climate center at the Natural Resources Defense Council. A former co-worker of Goo's at NRDC, Hawkins has worked closely with him on climate legislation and other issues.

"He's very smart and very thoughtful, and I think he'll do an excellent job wherever he is," he said.

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:34 PM
To:	goo.michael@epa.gov
Subject:	Fw: Fwd: Draft blog on EPA GHG NSPS
Attach:	What New Coal Plants.docx

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Saturday, December 10, 2011 5:38 AM
Subject: Fwd: Draft blog on EPA GHG NSPS

FYI. I think I should use the Inside EPA piece to get our views out there before the WSJ-Limbuagh-Fox echo chamber starts up.
I am interested in your feedback.
David

Sent from my iPad

Attached and pasted in is a draft blog responding to the industry attacks launched in Friday s Inside EPA piece. I would like to post Monday morning so please give me your comments before then.
David

What New Coal Plants?
Flacks for the coal lobby have their hair on fire about the rumored content of a draft EPA rule for CO2 pollution from new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for the foreseeable future. We don t know what the draft rule says but we should all be asking a simple question. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?

Let s look at the facts. Starting about ten years ago, there were waves of announcements for scores of new coal plants. In all, nearly 200 coal plants were proposed. Now only a handful of these projects are technically alive and they are on life support. A small number of proposed plants have permits but like many previous plants with such permits, most if not all of these proposals will turn out to be vaporware. A permit may get a developer a

meeting with project financiers but it will not get their money. The finance community understands new coal plants are simply not economic, given the alternatives that are available.

Other than a few plants under construction there is virtually no prospect of new conventional coal plants being built in the next quarter century according to the Energy Information Administration [Link to AEO2011]. EIA reports no new planned coal plants coming online after 2012 and only two unplanned gigawatts (GW) of coal with carbon capture and sequestration coming online around 2017; then nothing more through 2035, the end of the EIA forecast period.

Are the rumored new EPA CO2 standards responsible for the collapse of the new coal plant boom? No. New coal plants have succumbed to market forces. Abundant supplies of natural gas have produced lower prices for that fuel and those low prices seem here to stay. Materials costs have risen substantially and that makes capital-intensive coal plants a bad bet. Energy efficiency is increasingly recognized as the smartest way to balance power supply and demand and that is enabling economic growth with lower electricity demand. Cost reductions in renewable resources like wind and solar, along with supportive policies, have resulted in rapid growth of these projects to meet new demand and replace retiring dirty coal plants.

The market is also penalizing proposals for new conventional coal plants due to their very high CO2 emissions. Financiers know that denying the fact of global warming will not make it go away. So a project with high CO2 emissions has a large built-in financial risk that only grows over time. And that risk is unbounded, since without a clear policy roadmap it is impossible to calculate a reliable estimate of what it will cost to mitigate a conventional coal plant s high CO2 emissions.

The long lead time for coal plants underscores the conclusion that these projects are bad bets. It takes about ten years to build a coal plant from initial conception to start-up. Then it takes another 15-25 years for investors to get their money back. Even without low gas prices, an investor would have to believe that no action to address CO2 pollution will be taken over the next quarter century for them to put their money at risk in new conventional coal plants. This is not a risk that sensible investors are willing to take. So it should be no surprise that plans for new coal plants have been abandoned right and left in the United States.

As for a new EPA standard for CO2, we won t know what it says until early next year according to EPA Administrator Lisa Jackson. But let s assume EPA were to set a fuel-neutral standard for new fossil plants; one that could be met by new natural gas combined cycle plants or by new coal plants with carbon capture and storage. Such a standard would not prevent the construction of new coal plants, if and when the private sector decides such plants are a better option than alternatives. No, such a standard would just provide a level playing field for the two leading fossil fuels in the power sector: coal and natural gas. (Such a rule would not be a truly level playing field for electric resource investments since it would still heavily favor fossil fuels over zero-emitting options like efficiency, renewables, or nuclear if the latter s many problems could be solved.)
& nbsp;
Under a fuel-neutral CO2 standard a new coal plant designed to capture about 60% of its CO2 would comply with the standard. The coal lobby will complain about the cost of carbon capture and sequestration (CCS) but that cost will not get lower if standards were set to

ensure no new coal plants will ever have to employ CCS. And the bottom line is that today it is not the cost of CCS that is blocking new coal plants; it is the cost of plain old dirty coal plants compared to the alternatives that is shelving these proposals.

Of course, no one should be surprised that the coal lobby thinks the notion of a level playing field standard is the policy equivalent of the swine flu. But we don t build new power plants in order to prop up the coal industry. We want new power resources, not to help burn more coal, but to provide heat, light, comfort, convenience and to do so reliably and in a manner that does not send our kids to the emergency room with asthma attacks, our parents to an early death, or condemn our grandchildren to a planet with a climate so disrupted that their lives will be immeasurably less safe and enriching.

Despite the coal lobby s rhetoric, building new conventional coal plants is a bad economic bet for society as well as for individual investors. Even in countries where building a new coal plant appears to be cheaper than investing in cleaner energy, the International Energy Agency reports that such a path will produce huge net economic losses. IEA reports [cite to WEO2011] that for every dollar saved by investing in a dirtier resource before 2020, countries will wind up spending more than four dollars after 2020 to overcome the impact of those dirty investments.

So let s have the debate. The market has walked away from conventional coal plants. Should EPA try to hold back the tide? Should EPA set CO2 standards for new power plants that are twisted to make the coal industry happy? Or should EPA follow the law and good policy and set standards that provide a level playing field for coal and natural gas and avoid locking us into another round of new multi-billion dollar old coal technology that will cost us more and damage our health and the only climate we have?

From: michael Goo Ex. 6 - Personal Privacy
Sent: Monday, August 19, 2013 2:41 PM
To: goo.michael@epa.gov
Subject: Fw: Fwd: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards

---

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: "goo.michael@epa.gov" <goo.michael@epa.gov>
Sent: Thursday, May 9, 2013 4:56 PM
Subject: Fw: Fwd: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, February 3, 2012 4:24 PM
Subject: Fwd: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards

Typed on tiny keyboard. Caveat lector.

Begin forwarded message:

From: "Doniger, David" <ddoniger@nrdc.org>
Date: February 3, 2012 12:59:38 PM EST
To: <clean@lists.usclimatenetwork.org>
Subject: [CLEAN] blog: Toxic Trio Attacks EPA's Carbon Pollution Safeguards
Reply-To: "Doniger, David" <ddoniger@nrdc.org>

http://switchboard.nrdc.org/blogs/ddoniger/toxic_trio_attacks_epas_carbon.html

Toxic Trio Attacks EPA's Carbon Pollution Safeguards

In their latest attack on vital clean air safeguards, three senior House Republicans are trying to stop the Environmental Protection Agency from doing its job under the

Clean Air Act to protect Americans from dangerous carbon pollution from new power plants pollution that threatens our health and drives our increasingly extreme weather.

In a letter earlier this week, Energy and Commerce Committee chairman Fred Upton (R-MI) joined with two other friends of the big polluters, Joe Barton (R-TX) and Ed Whitefield (R-KY), to demand that the White House block those new power plant standards.

After years of delay, EPA is on the verge of issuing the first national limits on the carbon dioxide that will spew from the smokestacks of electric power plants to be built over the next decade. EPA is following the Clean Air Act passed by Congress, of course and *two* Supreme Court decisions.

Carbon pollution threatens the health of Americans by causing more severe heat waves and contributing to more devastating floods, rising sea levels, poor air quality and many other health threats. Power plants are the nation s biggest carbon polluters, and there are no national limits on that pollution.

Poll after poll confirms that the American people count on EPA to protect them from dangerous carbon pollution, don t trust polluters to police themselves, and don t buy the House Republicans claims that EPA safeguards kill jobs. (See here, here, here, and here.)

But that s not good enough for the toxic trio. These are the same guys who led last year s unprecedented assault on the nation s public health and pollution laws in the House of Representatives. They helped pushed 191 polluter-protection measures through the House last year. Fortunately, nearly all of them died in the Senate.

Their letter attempts to blame EPA for blocking construction of a hypothetical new generation of coal-burning and carbon-spewing power plants. Well, as my colleague David Hawkins puts it, What New Coal Plants? Citing forecasts from the Energy Information Administration and the private sector, Hawkins writes:

> Haven't they been paying attention? No one wants to build new coal plants. Except for a handful already underway, no more are planned for the foreseeable future. The future supply of electric power belongs to natural gas, wind power and other renewables, and greater energy efficiency in our homes, offices, and industries.

This blame-EPA-for-your-own-business-decisions game is nothing new. Just last week First Energy in Ohio announced that it will close some 50-year old coal-burning plants in September 2012. As NRDC s Henry Henderson explains, First Energy sought to blame the 2012 closures on EPA s new mercury standards even though it wouldn t have to meet those standards until *2015,* and even though it had idled some of those units more than a year ago.

Despite the trio s claims, the standards EPA is expected to propose will not bar the construction of new coal plants. What they will do is set an emission rate performance standard (not a cap) that new coal plants must meet, based on what is technically feasible and economically reasonable. Such standards could and should provide the market with a genuine reason to use carbon capture and storage technology something lacking in today s policy environment. Unlike politicians and ideologues who blind themselves to the science, most power company executives and investors understand that they will need this technology if

they are ever going to be able build coal plants again.
The Upton-Barton-Whitfield letter repeats the tired-out charge that EPA is engaged in a back door attempt to implement the climate and energy legislation that Congress failed to enact in 2010. They ignore the *existing* Clean Air Act, passed by Congress decades ago, which gave EPA the duty and the authority to tackle new pollution threats as science identifies them. As the Supreme Court held in *Massachusetts v. EPA* in 2007, and again in *American Electric Power v. Connecticut* last year, it is already EPA s job to curb dangerous carbon pollution and protect our health and our climate under the Clean Air Act.
No matter how many times this group of angry lawmakers try to mislead the public with wild claims about EPA's standards, the people's response is the same: we believe in EPA, not you and your polluter friends.

David D. Doniger
Policy Director, Climate and Clean Air Program
Natural Resources Defense Council

Please note our new address:
1152 15th Street, NW, Suite 300
Washington, DC 20005

Phone: (202) 289-2403
Cell: (202) 321-3435
Fax: (202) 289-1060
ddoniger@nrdc.org
on the web at www.nrdc.org
read my blog: http://switchboard.nrdc.org/blogs/ddoniger/

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:25 PM
To:	goo.michael@epa.gov
Subject:	Fw: ICF materials

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: "Hawkins, Dave" <dhawkins@nrdc.org>
Sent: Friday, April 22, 2011 6:34 PM
Subject: Re: ICF materials

THANKS

From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Fri, April 22, 2011 4:43:07 PM
Subject: ICF materials

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:24 PM
To:	goo.michael@epa.gov
Subject:	Fw: ICF materials

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, April 22, 2011 4:43 PM
Subject: ICF materials

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:33 PM
To:	goo.michael@epa.gov
Subject:	Fw: Inside epa

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: "Hawkins, Dave" <dhawkins@nrdc.org>
Sent: Friday, December 9, 2011 5:30 PM
Subject: Re: Inside epa

Glad you are on the case and yes that part is wrong and lets talk about this more when you get back---maybe a report or two or something in january showing that there is no new coal being built might be helpful.....thx

From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, December 9, 2011 12:51 PM
Subject: Inside epa

What I sent unattributed to inside epa in response to today's story
> "Flacks for the coal lobby are screaming about rumored content of a draft EPA rule for new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for a decade or more. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?"

What is the deal with the heat rate form for the std? Is that accurate? If so, it would not be possible for a coal unit with CCS to comply. I assume this part is wrong.

Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:32 PM
To:	goo.michael@epa.gov
Subject:	Fw: Inside epa

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, December 9, 2011 12:51 PM
Subject: Inside epa

What I sent unattributed to inside epa in response to today's story
> "Flacks for the coal lobby are screaming about rumored content of a draft EPA rule for new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for a decade or more. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?"

What is the deal with the heat rate form for the std? Is that accurate? If so, it would not be possible for a coal unit with CCS to comply. I assume this part is wrong.

Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:32 PM
To:	goo.michael@epa.gov
Subject:	Fw: InsideEPA

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Ex. 6 - Michael Goo
Sent: Tuesday, December 6, 2011 5:22 AM
Subject: InsideEPA

Dawn Reeves at Inside EPA says the following:
"Also im writing this week that the nsps at the white house sets a standard at nat gas combined cycle, sending a signal of no new coal w/o igcc and ccs."

We are not commenting.

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:47 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: Michael Goo Ex. 6 - Personal Privacy
To: David Hawkins
Sent: Tuesday, September 25, 2012 12:53 PM
Subject: Re: Lunch Monday?

On my way. You sure it's safe for me to show my face in the Nrdc offices?

Sent from my iPhone

On Sep 25, 2012, at 10:37 AM, David Hawkins Ex. 6 - Personal Privacy wrote:

> Lincoln is on Vermont Ave b/n L and M Sts NW; one block from new NRDC office. I got a message you are coming to the NRDC office. RIght?
>
> On Tue, Sep 25, 2012 at 8:46 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
>
> > Yep. 1 pm Lincoln. Where is Lincoln?
> >
> > Sent from my iPhone
> >
> > On Sep 25, 2012, at 8:34 AM, David Hawkins Ex. 6 - Personal Privacy wrote:
> >
> > > Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.
> > >
> > > Sent from my iPad
> > >
> > > On Sep 25, 2012, at 8:31 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

No lets go there. I can move my 1 pm

Sent from my iPhone

On Sep 25, 2012, at 8:05 AM, David Hawkins
Ex. 6 - Personal Privacy wrote:

> Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
>
> On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo
> Ex. 6 - Personal Privacy wrote:
>
> > Good question. What's near you?
> >
> > Sent from my iPhone
> >
> > On Sep 24, 2012, at 6:00 PM, David Hawkins
> > Ex. 6 - Personal Privacy wrote:
> >
> > > Where are we having lunch?
> > >
> > > Sent from my iPad
> > >
> > > On Sep 24, 2012, at 9:03 AM, Michael Goo
> > > Ex. 6 - Personal Privacy wrote:
> > >
> > >> Let's keep it on for Tuesday if that still works.
> > >>
> > >> Sent from my iPhone
> > >>
> > >> On Sep 23, 2012, at 9:50 PM, David Hawkins
> > >> Ex. 6 - Personal Privacy wrote:
> > >>
> > >>> My plans changed and lunch is now open for me Monday if that is better for you.
> > >>>
> > >>> Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:43 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: Michael Goo Ex. 6 - Personal Privacy
To: David Hawkins
Sent: Monday, September 24, 2012 9:03 AM
Subject: Re: Lunch Monday?

Let's keep it on for Tuesday if that still works.

Sent from my iPhone

On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:

> My plans changed and lunch is now open for me Monday if that is better for you.
>
> Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:44 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: David Hawkins Ex. 6 - Personal Privacy
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Monday, September 24, 2012 6:00 PM
Subject: Re: Lunch Monday?

Where are we having lunch?

Sent from my iPad

On Sep 24, 2012, at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> Let's keep it on for Tuesday if that still works.
>
> Sent from my iPhone
>
> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
>> My plans changed and lunch is now open for me Monday if that is better for you.
>>
>> Sent from my iPad

From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Monday, August 19, 2013 2:44 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: David Hawkins [Ex. 6 - Personal Privacy]
To: Michael Goo [Ex. 6 - Personal Privacy]
Sent: Tuesday, September 25, 2012 8:05 AM
Subject: Re: Lunch Monday?

Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call

On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo [Ex. 6 - Personal Privacy] wrote:

> Good question. What's near you?
>
> Sent from my iPhone
>
> On Sep 24, 2012, at 6:00 PM, David Hawkins [Ex. 6 - Personal Privacy] wrote:
>
> > Where are we having lunch?
> >
> > Sent from my iPad
> >
> > On Sep 24, 2012, at 9:03 AM, Michael Goo [Ex. 6 - Personal Privacy] wrote:
> >
> >> Let's keep it on for Tuesday if that still works.
> >>
> >> Sent from my iPhone
> >>
> >> On Sep 23, 2012, at 9:50 PM, David Hawkins [Ex. 6 - Personal Privacy] wrote:
> >>
> >>> My plans changed and lunch is now open for me Monday if that is better for you.
> >>>
> >>> Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:45 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: Michael Goo Ex. 6 - Personal Privacy
To: David Hawkins
Sent: Tuesday, September 25, 2012 8:31 AM
Subject: Re: Lunch Monday?

No lets go there. I can move my 1 pm

Sent from my iPhone

On Sep 25, 2012, at 8:05 AM, David Hawkins Ex. 6 - Personal Privacy wrote:

> Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
>
> On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
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> > Sent from my iPhone
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> > > On Sep 24, 2012, at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
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>> On Sep 23, 2012, at 9:50 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
>>
>>> My plans changed and lunch is now open for me Monday if that is better for you.
>>>
>>> Sent from my iPad

< /DIV>

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:46 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: David Hawkins Ex. 6 - Personal Privacy
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 8:34 AM
Subject: Re: Lunch Monday?

Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.

Sent from my iPad

On Sep 25, 2012, at 8:31 AM, Michael Goo Ex. 6 - Personal Privacy wrote:

> No lets go there. I can move my 1 pm
>
> Sent from my iPhone
>
> On Sep 25, 2012, at 8:05 AM, David Hawkins Ex. 6 - Personal Privacy wrote:
>
> > Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
> >
> > On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
> >
> > > Good question. What's near you?
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> On Sep 24, 2012, at 9:03 AM, Michael Goo
Ex. 6 - Personal Privacy wrote:
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Ex. 6 - Personal Privacy wrote:
>>
>>> My plans changed and lunch is now open for me Monday if that is better for you.
>>>
>>> Sent from my iPad

< /DIV>

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:43 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: David Hawkins Ex. 6 - Personal Privacy
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Sunday, September 23, 2012 9:50 PM
Subject: Lunch Monday?

My plans changed and lunch is now open for me Monday if that is better for you.

Sent from my iPad

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:46 PM
To:	goo.michael@epa.gov
Subject:	Fw: Lunch Monday?

----- Forwarded Message -----
From: Michael Goo
To: David Hawkins < **Ex. 6 - Personal Privacy**
Sent: Tuesday, September 25, 2012 8:46 AM
Subject: Re: Lunch Monday?

Yep. 1 pm Lincoln. Where is Lincoln?

Sent from my iPhone

On Sep 25, 2012, at 8:34 AM, David Hawkins **Ex. 6 - Personal Privacy** wrote:

> Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.
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> > > On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo **Ex. 6 - Personal Privacy** wrote:
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Ex. 6 - Personal Privacy wrote:
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>>> My plans changed and lunch is now open for me Monday if that is better for you.
>>>
>>> Sent from my iPad

< /DIV>

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:35 PM
To:	goo.michael@epa.gov
Subject:	Fw: MATS

----- Forwarded Message -----
From: "Hawkins, Dave" Ex. 6 - Personal Privacy
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Saturday, December 17, 2011 9:27 AM
Subject: MATS

Hi Michael,
Was the rule in fact signed yesterday?
David

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:18 PM
To:	goo.michael@epa.gov
Subject:	Fw: Memo
Attach:	111d Memo 5.30.doc

----- Forwarded Message -----
From: John Coequyt <John.Coequyt@sierraclub.org>
To: michael Goo Ex. 6 - Personal Privacy
Sent: Tuesday, May 31, 2011 2:33 PM
Subject: Memo

Michael:

First, you might want to change your personal email address, now that you have new job and all.

Attached is a memo I didn't want to send in public.

Standards of Performance for Existing Sources

Issue: Must a standard of performance under Clean Air Act section 111(d) be achievable by every source in a given category?

Analysis:

The definition of a "standard of performance" in section 111(a)(1) requires that the standard be "achievable" based on the best "demonstrated" "systems of emission reduction." It provides:

> a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

This definition applies to standards for both new and existing sources. *See* 111(b)(1)(B), 111(d)(1). The statute does not define "achievable," nor does it state that every existing source in the category must be able to achieve the standard. The term "achievable" is ambiguous and EPA therefore has discretion to adopt its own reasonable interpretation.

The case law makes it clear that when establishing performance standards under section 111 for a given source category, EPA need not set standards that are achievable by every existing source in that category. Performance standards can be technology-forcing:

> Recognizing that the Clean Air Act is a technology-forcing statute, we believe EPA does have authority to hold the industry to a standard of improved design and operational advances, so long as there is substantial evidence that such improvements are feasible and will produce the improved performance necessary to meet the standard.

Sierra Club .v Costle, 657 F.2d 298, 364 (D.C. Cir. 1981)(footnote omitted). In fact, for new sources, the D.C. Circuit has held that the standard need not be achievable by *any* existing source. It can go beyond the current state of the art as long as it is a reasonable projection of what will be achievable based on existing technology. *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 391 (D.C. Cir. 1973). The court held:

> We begin by rejecting the suggestion of the cement manufacturers that the Act's requirement that emission limitations be "adequately demonstrated" necessarily implies that any cement plant now in existence be able to meet the proposed standards. Section 111 looks toward what

> may fairly be projected for the regulated future, rather than the state of the art at present, since it is addressed to standards for new plants-old stationary source pollution being controlled through other regulatory authority.

Id. The court's reasoning distinguishes new and old sources, relying on section 111's focus on new sources for its conclusion that existing sources do not necessarily need to be able to meet the standard.

For existing sources, unlike new sources, it obviously would not be a reasonable interpretation of the statute for EPA to set a standard that no existing plant can achieve. But EPA does have discretion to set a standard under 111(d) that (1) no existing plant is currently achieving, and (2) not every existing plant is capable of achieving. That discretion arises from the ambiguity of the "standard of performance" definition and the language of section 111(d).

Section 111(d) contemplates that the states will implement performance standards for existing sources, and that "[r]egulations of the Administrator under this paragraph shall permit the State in applying a standard of performance to any particular source . . . to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies." The statute does not define "remaining useful life," so EPA has discretion to adopt a reasonable definition. That definition need not be based solely on age; it can also consider factors such as efficiency, capacity factor, investment in pollution controls, etc.

By allowing consideration of the remaining useful life of the existing source, the statute anticipates that some sources will not ultimately meet the standard before they reach the end of their remaining useful life and shut down. EPA has already interpreted 111(d) to authorize states to establish compliance schedules for sources to achieve the standard. 40 CFR 60.24. If states are to phase in compliance for particular sources on a schedule that takes into consideration their remaining useful life "among other factors," it is a simple matter – and perfectly acceptable under the statute – to allow plants nearing the end of their remaining useful life to operate without achieving the standard and then require them to shut down at the end of that remaining useful life. EPA has already acknowledged this concept in applying the "remaining useful life" provision in the regional haze context. *See* 40 CFR pt. 51, App. Y, IV.D.STEP 4.k.2(2) (if decision by the facility to shut down affects the BART determination "this date should be assured by a federally- or State-enforceable restriction preventing further operation"); *see also* 42 U.S.C. §7491(g)(2) (statutory BART factors include "remaining useful life of the source"). EPA can therefore establish a performance standard for existing plants that is not achievable by any plant nearing the end of its "remaining useful life" as defined by EPA.

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 5:01 PM
To:	goo.michael@epa.gov
Subject:	Fw: Retire v Co-fire
Attach:	retire v cofire.docx

----- Forwarded Message -----
From: "Lashof, Dan" <dlashof@nrdc.org>
To: Ex. 6 - Michael Goo
Cc: "Hawkins, Dave" <dhawkins@nrdc.org>; "Doniger, David" <ddoniger@nrdc.org>
Sent: Wednesday, June 8, 2011 6:39 PM
Subject: Retire v Co-fire

Michael
This is a pretty basic analysis, but it makes me even more concerned that a coal-only standard is not likely to achieve significant emission reductions. I m sending this only to you, Hawkins and Doniger. Attached and pasted below.
-Dan

Retire v Co-fire

Start with a moderately inefficient coal plant.
Heat rate: 11,000 Btu/kWh
Emission rate: 2286 lbs/MWh (at national average carbon content of 25.7 kgC/MBtu)
Fuel Cost: $23.21/MWh (at EIA projected coal cost of $2.11/MBtu in 2015)

Assume target emission rate is 2100 lbs/MWh.

Option 1: Retire coal plant and replace with efficient natural gas combined cycle (NGCC)
NGCC heat rate: 7200 Btu/KWh
NGCC emission rate: 842 lbs/MWh
Fuel cost operating on gas: $33.62/MWh (at EIA projected gas cost of $4.67/MBtu)

Option 2: Co-fire with natural gas in existing boiler, heat rate remains 11,000 Btu/KWh
Emission rate with gas: 1287 lbs/Mbtu
Co-firing percentage required to meet target: 18.6% gas
Fuel cost operating on gas: $51.37/MWh (at EIA projected gas cost of $4.67/MBtu)
Average fuel cost: $28.44/MWh

Observations:

Even though using gas in an NGCC is much more efficient than co-firing gas in the existing coal boiler, the average fuel costs for operating the coal plant co-fired with gas to meet the standard are considerably lower than the fuel costs to run an efficient NGCC (by $5/MWh). That means that, all other things being equal, it s cheaper to keep the coal plant online and co-fire with gas to meet the standard rather than to retire the coal plant and replace all of its output with increased utilization of NGCC capacity. The comparison is even more favorable to retaining the coal plant if a new gas plant would have to be built to replace the capacity.

In fact, the emission rate standard would have to be lowered by 17% to 1915 lbs/MWh, requiring 37% gas co-firing, to bring the average fuel costs of the coal plant up to $33.7/MWh, the level required to make it cheaper to retire the coal plant and operate the NGCC, rather than co-fire (see below). It s hard to see how EPA could defend such a standard, which raises the fuel costs of the affected units by almost 50%, or over $10/MWh [particularly when the same reduction could be achieved by re-dispatching 26% of the coal plants MWhs to NGCC, at an incremental cost of less than $3/MWh if the standard were structured so that re-dispatch can count toward compliance.]

Assume target emission rate is 1915 lbs/MWh.

Option 1: Retire coal plant and replace with efficient natural gas combined cycle (NGCC)
NGCC heat rate: 7200 Btu/KWh
NGCC emission rate: 842 lbs/MWh
Fuel cost operating on gas: $33.62/MWh (at EIA projected gas cost of $4.67/MBtu)

Option 2: Co-fire with natural gas in existing boiler, heat rate remains 11,000 Btu/KWh
Emission rate with gas: 1287 lbs/Mbtu
Co-firing percentage required to meet target: 37.1% gas
Fuel cost operating on gas: $51.37/MWh (at EIA projected gas cost of $4.67/MBtu)
Average fuel cost: $33.66/MWh

Reduce utilization of coal plant, replace MWhs with efficient gas plant
NGCC heat rate: 7200 Btu/KWh
NGCC emission rate: 842 lbs/MWh
Re-dispatch percentage required to meet target: 25.7% gas
Fuel cost operating on gas: $33.62/MWh
Average fuel cost: $25.88

Daniel A. Lashof, Ph.D.

Director, NRDC Climate Center
202-289-6868

Retire v Cofire

Start with a moderately inefficient coal plant.
Heat rate: 11,000 Btu/kWh
Emission rate: 2286 lbs/MWh (at national average carbon content of 25.7 kgC/MBtu)
Fuel Cost: $23.21/MWh (at EIA projected coal cost of $2.11/MBtu in 2015)

Assume target emission rate is 2100 lbs/MWh.

Option 1: Retire coal plant and replace with efficient natural gas combined cycle (NGCC)
NGCC heat rate: 7200 Btu/KWh
NGCC emission rate: 842 lbs/MWh
Fuel cost operating on gas: $33.62/MWh (at EIA projected gas cost of $4.67/MBtu)

Option 2: Co-fire with natural gas in existing boiler, heat rate remains 11,000 Btu/KWh
Emission rate with gas: 1287 lbs/Mbtu
Co-firing percentage required to meet target: 18.6% gas
Fuel cost operating on gas: $51.37/MWh (at EIA projected gas cost of $4.67/MBtu)
Average fuel cost: $28.44/MWh

Observations:
Even though using gas in an NGCC is much more efficient than co-firing gas in the existing coal boiler, the average fuel costs for operating the coal plant co-fired with gas to meet the standard are considerably lower than the fuel costs to run an efficient NGCC (by $5/MWh). That means that, all other things being equal, it's cheaper to keep the coal plant online and co-fire with gas to meet the standard rather than to retire the coal plant and replace all of its output with increased utilization of NGCC capacity. The comparison is even more favorable to retaining the coal plant if a new gas plant would have to be built to replace the capacity.

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From:	michael Goo < Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:26 PM
To:	goo.michael@epa.gov
Subject:	Fw: Retire v Co-fire
Attach:	retire v cofire.docx

----- Forwarded Message -----
From: "Lashof, Dan" <dlashof@nrdc.org>
To: Ex. 6 - Michael Goo
Cc: "Hawkins, Dave" <dhawkins@nrdc.org>; "Doniger, David" <ddoniger@nrdc.org>
Sent: Wednesday, June 8, 2011 6:39 PM
Subject: Retire v Co-fire

Michael
This is a pretty basic analysis, but it makes me even more concerned that a coal-only standard is not likely to achieve significant emission reductions. I m sending this only to you, Hawkins and Doniger. Attached and pasted below.
-Dan

Retire v Co-fire

Start with a moderately inefficient coal plant.
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Daniel A. Lashof, Ph.D.

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Re-dispatch percentage required to meet target: 25.7% gas
Fuel cost operating on gas: $33.62/MWh
Average fuel cost: $25.88

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 4:59 PM
To:	goo.michael@epa.gov
Subject:	Fw: Returned your call

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: goo.michael@epa.gov; Ex. 6 - Michael Goo
Sent: Wednesday, November 23, 2011 2:51 PM
Subject: Returned your call

Ex. 6 - Personal Privacy

From: michael Goo Ex. 6 - Personal Privacy
Sent: Monday, August 19, 2013 2:31 PM
To: goo.michael@epa.gov
Subject: Fw: Returned your call

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: goo.michael@epa.gov; Ex. 6 - Michael Goo
Sent: Wednesday, November 23, 2011 2:51 PM
Subject: Returned your call

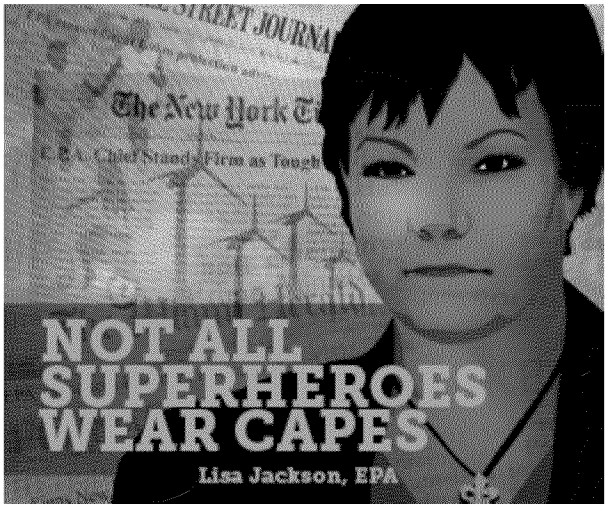
Ex. 6 - Personal Privacy

From:	michael Goo < Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:13 PM
To:	goo.michael@epa.gov
Subject:	Fw: Superhero
Attach:	LisaJacksonBannerAd_300x250.jpg

----- Forwarded Message -----
From: John Coequyt <john.coequyt@sierraclub.org>
To: Ex. 6 - Michael Goo
Sent: Thursday, July 19, 2012 2:32 PM
Subject: Superhero

Here is the ad.

--
John Coequyt
Sierra Club
202-669-7060


NOT ALL
SUPERHEROES
WEAR CAPES
Lisa Jackson, EPA

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 5:00 PM
To:	goo.michael@epa.gov
Subject:	Fw: draft 111(d) specs
Attach:	Specs nov 18 2011.docx

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, November 18, 2011 4:08 PM
Subject: draft 111(d) specs

FYI

Draft 111(d) GHG Specs

Covered sources: all existing fossil units

Form of guideline/standard: lb/MWh annual emission rate

Obligation: fossil units must achieve an improvement in CO2 emission rate (lbs/MWh) relative to national baseline (2008-2010) emission rates for coal, gas, oil. Broad emission-rate averaging and crediting for zero-carbon electric service resources allowed.

Schedule: phase 1 by [2017]; phase 2 by 2020

Degree of improvement from baseline emission rate:

Coal: 5% by [2017]; 15% by 2020

Gas: 2.5% by [2017]; 5% by 2020

[oil -tbd]

Compliance mechanism/state equivalency:

EPA guideline would --

provide for compliance determinations based on a state-wide-fossil-fleet average basis (dispatch shifts to less carbon intensive fuel would be an eligible compliance technique);

count incremental DSM, DR, and zero-carbon resource generation in determining compliance with the target emission rate improvement;

permit interstate emission rate averaging within the ISO/RTO region (or at the state's option, nationally);

allow banking.

In the case of states with caps or similar measures, states could demonstrate equivalency by showing that the improvement in covered-sources' emission rate (including consideration of creditable incremental zero-carbon electric power and DSM/DR resources) would achieve the above required amounts of improvement.

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:30 PM
To:	goo.michael@epa.gov
Subject:	Fw: draft 111(d) specs
Attach:	Specs nov 18 2011.docx

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From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 5:00 PM
To:	goo.michael@epa.gov
Subject:	Fw: link to Jackson comment

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Friday, November 18, 2011 11:26 AM
Subject: link to Jackson comment

http://www.energynow.com/video/2011/11/17/epa-administrator-lisa-jackson-pollution-regulations

From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Monday, August 19, 2013 2:29 PM
To:	goo.michael@epa.gov
Subject:	Fw: link to Jackson comment

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo [Ex. 6 - Personal Privacy]
Sent: Friday, November 18, 2011 11:26 AM
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http://www.energynow.com/video/2011/11/17/epa-administrator-lisa-jackson-pollution-regulations

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 4:59 PM
To:	goo.michael@epa.gov
Subject:	Fw: my response to the WSJ

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Tuesday, November 22, 2011 6:00 PM
Subject: my response to the WSJ

The Journal accuses EPA of industrial planning because of its adoption of rules to reduce deadly pollution from dirty coal plants [cite]. Apparently, the writer played hooky from the Econ 101 class on externalities. Cutting harmful pollution from old coal plants does not make them artificially more expensive. To the contrary, the coddling of these polluters by the prior administration made their power artificially and fraudulently appear to be cheap. The costs of that pollution are real and by all analyses are many times larger than the costs of cleaning up these plants. How about taking the ideological blinders off and acknowledging that dirty does not mean better?

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:30 PM
To:	goo.michael@epa.gov
Subject:	Fw: my response to the WSJ

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From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:20 PM
To:	goo.michael@epa.gov
Subject:	Fw: nsps idea
Attach:	NSPS Option X V-J.docx

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: john.coequyt@sierraclub.org
Sent: Friday, May 6, 2011 9:54 AM
Subject: nsps idea

NSPS Option X

•□□□□□□□ Set a single[1] uniform emission rate or heat rate standard for all Da sources

•□□□□□□□ Standard would be somewhere in the range of 1600 (with trading) to 2100 (less or no trading) lbs CO2 per megawatt hour

•□□□□□□□ Use 2100 lbs CO2 per MW hour as straw proposal= roughly a heat rate of 10,000

o According to CATF guesstimates about 38% of existing capacity and would already meet this standard.

o About 28.5% of capacity are units with heat rates between 10,000-10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency

o The total percentage of units that can meet the standard easily without improvements and units that are close to the standard is about 65% of the coal fired fleet.

o Units above 10,500 heat rate would constitute about 34% of existing capacity.

o If all units above 10,500 heat rate retire BAU power systems emissions would drop by about 16%.

•□□□□□□□ BDT for subpart Da would be met by 65% of the units already therefore EPA can argue that it represents BDT.

•□□□□□□□ All units would able to meet this standard through conversion to natural gas boilers therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.

•□□□□□□ Many units could meet the standard through natural gas co-firing query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking natural gas co firing into account. Not all units can natural gas cofire.
•□□□□□□ Standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.
•□□□□□□ Could add a trading module for generation of credits within existing DA or within new and existing Da.
o Credits would be generated by setting a baseline for all existing sources using their 2008-2010 actual emissions.
o Sources with 2008-2010 baselines above the 10,000 heat rate could generate credits by emitting below 10,000 (including by shutting down) during the period between rule promulgation and the effective date of the standard (2020)
o A second tranche of credit generating units could be included---for instance those units with heat rates between 8000 and 10,000. It s not clear what the rationale would be for allowing those units to generate credits and not others. Modeling could help figure out if a second tranche is necessary or advisable.
•□□□□□□ Remaining useful life safety valve: Instead of (or in addition to) trading, remaining useful life could be defined in terms of the impact of meeting the standard on a state (or RTO s) average electricity price. If a state determined that the impact of a specific unit meeting the standard would result in an electricity price impact greater than x% (say 2%) then the state could determine that the source in question should not meet the standard.
•□□□□□□ State equivalency: Draft model rule allowing states to determine equivalency with this standard looking at all DA units in their state.
•□□□□□□ CCS use demonstration provision to allow first 10 GW of CCS to meet an 1800 lbs CO2 per MW hour and to generate credit for all generation below that level.

Draft Deliberative

NSPS Option for Existing Utilities: Single Emission Rate Approach

AKA V-J

- Set a single[1] uniform emission rate or heat rate standard for all subpart Da sources.
- Standard would be somewhere in the range of 1600 to 2100 lbs CO2 per megawatt hour (MW-hr)
- Use 2100 lbs CO2 per MW-hr as straw proposal= roughly a heat rate of 10,000
    - According to CATF rough projections, about 38% of existing capacity[2] would already meet this standard.
    - About 28.5% of existing capacity[3] is composed of units with heat rates between 10,000- 10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency.
    - The total percentage of capacity that can meet the standard easily without improvements, plus the units that are close to the standard and would attempt to make changes is about 66.5% of the coal fired fleet.
    - Units above 10,500 heat rate would constitute about 33.5% of existing capacity[4].
    - If all units above 10,500 heat rate retire as a result of this policy, and the energy produced by those units was replaced with new natural gas, projected BAU power system CO2 emissions would drop by about 16%.

- BDT for subpart Da would be met by 65% of the existing units already, therefore EPA should be able to argue that a 2100 lbs CO2 per MW-hr standard meets the legal test as BDT.

- All units would be able to meet this standard through conversion to natural

[1] I believe this same approach could be used under the subcategorization approach being authored by Kevin, using differing efficiency levels.
[2] Or 37% of recent coal fired generation
[3] 28 % of recent coal fired generation
[4] 32% of recent coal fired generation

gas boilers, therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.

- Some units could meet or partially meet the standard through natural gas co-firing. Query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking large amounts of natural gas co-firing into account. Not all units can natural gas co-fire. It does not appear that using natural gas co-firing would be economic for a large percentage of the capacity above the 10,000 heat rate.
- The standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.
- EPA could add a trading module for generation of credits within existing subpart Da or within new and existing subpart Da as follows
    - Credits would be generated by setting a baseline for all existing sources using their 2008-2010 actual emissions (or 2005-2010).
    - Sources with 2008-2010 baselines above the 10,000 heat rate could generate credits by emitting below 10,000 (including by shutting down) during the period between rule promulgation and the effective date of the standard (2020)
    - A second tranche of credit generating units could be included---for instance those units with heat rates between 8000 and 10,000. It's not clear what the rationale would be for allowing those units to generate credits and not others. Modeling could help figure out if a second tranche is necessary or advisable.
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- State equivalency: Draft model rule allowing states to determine equivalency with this standard looking at all Da units in their state.
- CCS—use demonstration provision to allow first 10 GW of CCS to meet an 1800 lbs CO2 per MW hour and to generate credit for all generation below

that level.

Pros:

- This option provides a "traditional NSPS" approach for establishing standards for this sector that is relatively simple and noncontroversial on its face.
- It should result in retirements of inefficient units (and thus total CO2 reduction), while allowing units on the margin to make efficiency changes to meet the standard.
- The mechanism is straight-forward and initially appears legally defensible. State equivalency issues will need to be more fully addressed, but should not be a heavy lift for this rule

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Monday, August 19, 2013 2:18 PM
To:	goo.michael@epa.gov
Subject:	Fw: nsps idea
Attach:	NSPS Option X V-J.docx

----- Forwarded Message -----
From: michael Goo Ex. 6 - Personal Privacy
To: john.coequyt@sierraclub.org
Sent: Friday, May 6, 2011 10:25 PM
Subject: Fw: nsps idea

sorry dont use the one in the message use the updated one in the attachment and let me know if you cant open the attachment

----- Forwarded Message ----
From: michael Goo Ex. 6 - Personal Privacy
To: john.coequyt@sierraclub.org
Sent: Fri, May 6, 2011 9:54:33 AM
Subject: nsps idea

NSPS Option X

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o According to CATF guesstimates about 38% of existing capacity and would already meet this standard.
o About 28.5% of capacity are units with heat rates between 10,000-10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency
o The total percentage of units that can meet the standard easily without improvements and units that are close to the standard is about 65% of the coal fired fleet.
o Units above 10,500 heat rate would constitute about 34% of existing capacity.

o If all units above 10,500 heat rate retire BAU power systems emissions would drop by about 16%.

•□□□□□□ BDT for subpart Da would be met by 65% of the units already therefore EPA can argue that it represents BDT.
•□□□□□□ All units would able to meet this standard through conversion to natural gas boilers therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.
•□□□□□□ Many units could meet the standard through natural gas co-firing query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking natural gas co firing into account. Not all units can natural gas cofire.
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Draft Deliberative

NSPS Option for Existing Utilities: Single Emission Rate Approach

AKA V-J

- Set a single[1] uniform emission rate or heat rate standard for all subpart Da sources.
- Standard would be somewhere in the range of 1600 to 2100 lbs CO2 per megawatt hour (MW-hr)
- Use 2100 lbs CO2 per MW-hr as straw proposal= roughly a heat rate of 10,000
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    - Units above 10,500 heat rate would constitute about 33.5% of existing capacity[4].
    - If all units above 10,500 heat rate retire as a result of this policy, and the energy produced by those units was replaced with new natural gas, projected BAU power system CO2 emissions would drop by about 16%.

- BDT for subpart Da would be met by 65% of the existing units already, therefore EPA should be able to argue that a 2100 lbs CO2 per MW-hr standard meets the legal test as BDT.

- All units would be able to meet this standard through conversion to natural

[1] I believe this same approach could be used under the subcategorization approach being authored by Kevin, using differing efficiency levels.
[2] Or 37% of recent coal fired generation
[3] 28 % of recent coal fired generation
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gas boilers, therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.

- Some units could meet or partially meet the standard through natural gas co-firing. Query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking large amounts of natural gas co-firing into account. Not all units can natural gas co-fire. It does not appear that using natural gas co-firing would be economic for a large percentage of the capacity above the 10,000 heat rate.
- The standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.
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- The mechanism is straight-forward and initially appears legally defensible. State equivalency issues will need to be more fully addressed, but should not be a heavy lift for this rule

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, May 9, 2013 4:57 PM
To:	goo.michael@epa.gov
Subject:	Fw: stuff

----- Forwarded Message -----
From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: michael Goo Ex. 6 - Personal Privacy
Sent: Thursday, February 2, 2012 10:51 PM
Subject: Re: stuff

We did a blog under Doniger's name that I think threads the needle

Sent from my iPad

On Feb 2, 2012, at 9:52 AM, "michael Goo" Ex. 6 - Personal Privacy wrote:

> although the cat is clearly out of the bag I would urge great caution in talking to anyone, especially press and the hill about the standard or the WP--any such talk is almost certainly going to be unhelpful as its proving to be in a number of unexpected quarters.....just an FYI---I know its not you but colleagues in the community.....
>
> **COMING FOR YOUR CARBON -** Top Energy and Commerce Republicans want the White House to pull back EPA's planned rulemaking on greenhouse gas emissions for new power plants, saying they worry the standards would require costly technologies like carbon capture and sequestration. "Such standards would be a back door cap-and-tax regime, circumventing the will of Congress and the American people," E&C Chairman Fred Upton and Reps. Joe Barton and Ed Whitfield wrote in a letter today to the White House. The letter: http://go.politicoemail.com/?qs=775fac9f4d26c3e256ec3bdee62168f6fb4de206ea788
> **WHO'S COUNTING?** The greenhouse gas new source performance standards have been at OMB since Nov. 7, meaning that today marks day 87 of the 90 day review period. The EPA originally agreed, in response to a lawsuit, to propose the rule by July 2011, but now remains in settlement (re)negotiations.

From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Monday, August 19, 2013 2:36 PM
To:	goo.michael@epa.gov
Subject:	Fw: stuff

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Sent:	Thursday, May 9, 2013 5:02 PM
To:	goo.michael@epa.gov
Subject:	Fw: update

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To: Michael Goo Ex. 6 - Personal Privacy
Sent: Saturday, April 9, 2011 8:55 AM
Subject: update

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From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Friday, May 6, 2011 10:25 PM
To:	john.coequyt@sierraclub.org
Subject:	Fw: nsps idea
Attach:	NSPS Option X V-J.docx

---

sorry dont use the one in the message use the updated one in the attachment and let me know if you cant open the attachment

----- Forwarded Message ----
From: michael Goo [Ex. 6 - Personal Privacy]
To: john.coequyt@sierraclub.org
Sent: Fri, May 6, 2011 9:54:33 AM
Subject: nsps idea

NSPS Option X

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From: michael Goo Ex. 6 - Personal Privacy
Sent: Friday, April 22, 2011 6:35 PM
To: Hawkins, Dave <dhawkins@nrdc.org>
Subject: Re: ICF materials

THANKS

From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo Ex. 6 - Personal Privacy
Sent: Fri, April 22, 2011 4:43:07 PM
Subject: ICF materials

From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Friday, December 9, 2011 5:30 PM
To:	Hawkins, Dave <dhawkins@nrdc.org>
Subject:	Re: Inside epa

Glad you are on the case and yes that part is wrong and lets talk about this more when you get back---maybe a report or two or something in january showing that there is no new coal being built might be helpful.....thx

From: "Hawkins, Dave" <dhawkins@nrdc.org>
To: Michael Goo [Ex. 6 - Personal Privacy]
Sent: Friday, December 9, 2011 12:51 PM
Subject: Inside epa

What I sent unattributed to inside epa in response to today's story
> "Flacks for the coal lobby are screaming about rumored content of a draft EPA rule for new fossil powerplants. They say it will kill new coal plants. Haven't they been paying attention? No one wants to build new coal plants. Except for a handful underway, no more are planned for a decade or more. Exactly why should EPA write a rule that is gerrymandered to make room for dirty plants that the private sector does not want to build?"

What is the deal with the heat rate form for the std? Is that accurate? If so, it would not be possible for a coal unit with CCS to comply. I assume this part is wrong.

Sent from my iPad

From: Michael Goo Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 8:32 AM
To: David Hawkins Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

No lets go there. I can move my 1 pm

Sent from my iPhone

On Sep 25, 2012, at 8:05 AM, David Hawkins Ex. 6 - Personal Privacy wrote:

> Lincoln Restaurant is near me. But if you have a 1 o'clock mtg perhaps we shd go nearer you. Your call
>
> On Tue, Sep 25, 2012 at 7:53 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
>
> > Good question. What's near you?
> >
> > Sent from my iPhone
> >
> > On Sep 24, 2012, at 6:00 PM, David Hawkins Ex. 6 - Personal Privacy wrote:
> >
> > > Where are we having lunch?
> > >
> > > Sent from my iPad
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> > > On Sep 24, 2012, at 9:03 AM, Michael Goo Ex. 6 - Personal Privacy wrote:
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> > >>
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> > >>> My plans changed and lunch is now open for me Monday if that is better for you.
> > >>>
> > >>> Sent from my iPad

From: Michael Goo Ex. 6 - Personal Privacy
Sent: Tuesday, September 25, 2012 8:46 AM
To: David Hawkins Ex. 6 - Personal Privacy
Subject: Re: Lunch Monday?

Yep. 1 pm Lincoln. Where is Lincoln?

Sent from my iPhone

On Sep 25, 2012, at 8:34 AM, David Hawkins Ex. 6 - Personal Privacy wrote:

> Ok but your scheduler, robin just emailed me saying she is moving the lunch appt to 1pm. That would work better for me if that works for you. Let me know.
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On my way. You sure it's safe for me to show my face in the Nrdc offices?

Sent from my iPhone

On Sep 25, 2012, at 10:37 AM, David Hawkins Ex. 6 - Personal Privacy wrote:

> Lincoln is on Vermont Ave b/n L and M Sts NW; one block from new NRDC office. I got a message you are coming to the NRDC office. RIght?
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From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Saturday, August 13, 2011 11:55 AM
To:	David Hawkins Ex. 6 - Personal Privacy
Subject:	Re: fyi

---

excellent. I did get to pershing and he said he thought maybe even levels above Todd would be willing to weigh in. I think Hilary might appreciate a chance to help given what is going on with keystone pipeline

Also lets talk on monday but two thoughts: One: CAP did an article in the post friday or thursday expressing unhappiness with obama---I dont know if Podesta might be willing to help send a signal that taking a pass on this is not a good idea politically?

And also though I am not sure how radioactive Carol Browner is at the WH I do know that Gary Guzy is a wholly owned subsidiary of that particular enterprise...

Finally I just realized that Phil Schliro remains in some capacity over there--I will work the waxman channel but if you also have channels, that may be our best hope.....

--- On **Fri, 8/12/11, David Hawkins** Ex. 6 - Personal Privacy wrote:

> From: David Hawkins Ex. 6 - Personal Privacy
> Subject: fyi
> To: Ex. 6 - Michael Goo
> Date: Friday, August 12, 2011, 4:01 PM
>
> what I sent to Todd
>
> Hi Todd,
>
> I hope you are well. I just wanted to put on your radar screen the upcoming proposed rules to set the first GHG limits for fossil power plants under the Clean Air Act. These rules along with the EPA rules for vehicles will determine how close the U.S. comes to using its existing authority to meet the President*s commitments to reduce U.S. emissions.
>
> EPA is currently scheduled to publish proposed rules at the end of September and I expect that the inter-agency review process on draft rules will begin soon.
>
> I anticipate that these rules will be controversial and that the White House will be hearing many voices of opposition to a rule that attempts to achieve any significant reductions from this important source of emissions. I do hope the State Department will a voice that stresses the importance of doing something meaningful to bring down emissions from this sector. There is no way for the U.S. to come close to the President*s commitment if this

sector is given a pass. I hope that State will be able to make the case in the administration deliberations that such an outcome would be very harmful to our interests.

I understand you are traveling but would love to discuss this with you at your convenience.

Thanks

David

From:	Michael Goo Ex. 6 - Personal Privacy
Sent:	Friday, December 16, 2011 12:58 PM
To:	drosenberg@nrdc.org
Subject:	Yo

Sent from my iPhone

From:	michael Goo [Ex. 6 - Personal Privacy]
Sent:	Friday, May 6, 2011 9:55 AM
To:	john.coequyt@sierraclub.org
Subject:	nsps idea
Attach:	NSPS Option X V-J.docx

NSPS Option X

•□□□□□□ Set a single[1] uniform emission rate or heat rate standard for all Da sources

•□□□□□□ Standard would be somewhere in the range of 1600 (with trading) to 2100 (less or no trading) lbs CO2 per megawatt hour

•□□□□□□ Use 2100 lbs CO2 per MW hour as straw proposal= roughly a heat rate of 10,000

o According to CATF guesstimates about 38% of existing capacity and would already meet this standard.

o About 28.5% of capacity are units with heat rates between 10,000-10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency

o The total percentage of units that can meet the standard easily without improvements and units that are close to the standard is about 65% of the coal fired fleet.

o Units above 10,500 heat rate would constitute about 34% of existing capacity.

o If all units above 10,500 heat rate retire BAU power systems emissions would drop by about 16%.

•□□□□□□ BDT for subpart Da would be met by 65% of the units already

therefore EPA can argue that it represents BDT.

•□□□□□□ All units would able to meet this standard through conversion to natural gas boilers therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.

•□□□□□□ Many units could meet the standard through natural gas co-firing query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking natural gas co firing into account. Not all units can natural gas cofire.

•□□□□□□ Standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.

•□□□□□□ Could add a trading module for generation of credits within existing DA or within new and existing Da.

o Credits would be generated by setting a baseline for all existing sources using their 2008-2010 actual emissions.

o Sources with 2008-2010 baselines above the 10,000 heat rate could generate credits by emitting below 10,000 (including by shutting down) during the period between rule promulgation and the effective date of the standard (2020)

o A second tranche of credit generating units could be included---for instance those units with heat rates between 8000 and 10,000. It s not clear what the rationale would be for allowing those units to generate credits and not others. Modeling could help figure out if a second tranche is necessary or advisable.

•□□□□□□ Remaining useful life safety valve: Instead of (or in addition to) trading, remaining useful life could be defined in terms of the impact of meeting the standard on a state (or RTO s) average electricity price. If a state determined that the impact of a specific unit meeting the standard would result in an electricity price impact greater than x% (say 2%) then the state could determine that the source in question should not meet the standard.

•□□□□□□ State equivalency: Draft model rule allowing states to determine equivalency with this standard looking at all DA units in their state.

•□□□□□□ CCS use demonstration provision to allow first 10 GW of CCS to meet an 1800 lbs CO2 per MW hour and to generate credit for all generation below that level.

Draft Deliberative

NSPS Option for Existing Utilities: Single Emission Rate Approach

AKA V-J

- Set a single[1] uniform emission rate or heat rate standard for all subpart Da sources.
- Standard would be somewhere in the range of 1600 to 2100 lbs CO2 per megawatt hour (MW-hr)
- Use 2100 lbs CO2 per MW-hr as straw proposal= roughly a heat rate of 10,000
    - According to CATF rough projections, about 38% of existing capacity[2] would already meet this standard.
    - About 28.5% of existing capacity[3] is composed of units with heat rates between 10,000- 10,500 and these represent the outer boundary of units that would attempt to meet the standard through improved efficiency.
    - The total percentage of capacity that can meet the standard easily without improvements, plus the units that are close to the standard and would attempt to make changes is about 66.5% of the coal fired fleet.
    - Units above 10,500 heat rate would constitute about 33.5% of existing capacity[4].
    - If all units above 10,500 heat rate retire as a result of this policy, and the energy produced by those units was replaced with new natural gas, projected BAU power system CO2 emissions would drop by about 16%.

- BDT for subpart Da would be met by 65% of the existing units already, therefore EPA should be able to argue that a 2100 lbs CO2 per MW-hr standard meets the legal test as BDT.

- All units would be able to meet this standard through conversion to natural

[1] I believe this same approach could be used under the subcategorization approach being authored by Kevin, using differing efficiency levels.
[2] Or 37% of recent coal fired generation
[3] 28 % of recent coal fired generation
[4] 32% of recent coal fired generation

gas boilers, therefore no unit would be required to shut down to meet the standard. Query whether many units would choose to do so.

- Some units could meet or partially meet the standard through natural gas co-firing. Query whether units would choose to do so and at which level---one could adjust the standard level downward to tune the standard to achieve the desired policy outcome and taking large amounts of natural gas co-firing into account. Not all units can natural gas co-fire. It does not appear that using natural gas co-firing would be economic for a large percentage of the capacity above the 10,000 heat rate.
- The standard could be made effective anywhere between 2018 and 2025. Use 2020 as a straw proposal.
- EPA could add a trading module for generation of credits within existing subpart Da or within new and existing subpart Da as follows
    - Credits would be generated by setting a baseline for all existing sources using their 2008-2010 actual emissions (or 2005-2010).
    - Sources with 2008-2010 baselines above the 10,000 heat rate could generate credits by emitting below 10,000 (including by shutting down) during the period between rule promulgation and the effective date of the standard (2020)
    - A second tranche of credit generating units could be included---for instance those units with heat rates between 8000 and 10,000. It's not clear what the rationale would be for allowing those units to generate credits and not others. Modeling could help figure out if a second tranche is necessary or advisable.
- Remaining useful life safety valve: Instead of (or in addition to) trading, remaining useful life could be defined in terms of the impact of meeting the standard on a state (or RTO's) average electricity price. If a state determined that the impact of a specific unit meeting the standard would result in an electricity price impact greater than x% (say 1%) then the state could determine that the source in question should not meet the standard.
- State equivalency: Draft model rule allowing states to determine equivalency with this standard looking at all Da units in their state.
- CCS—use demonstration provision to allow first 10 GW of CCS to meet an 1800 lbs CO2 per MW hour and to generate credit for all generation below

that level.

Pros:

- This option provides a "traditional NSPS" approach for establishing standards for this sector that is relatively simple and noncontroversial on its face.
- It should result in retirements of inefficient units (and thus total CO2 reduction), while allowing units on the margin to make efficiency changes to meet the standard.
- The mechanism is straight-forward and initially appears legally defensible. State equivalency issues will need to be more fully addressed, but should not be a heavy lift for this rule

From:	michael Goo Ex. 6 - Personal Privacy
Sent:	Thursday, February 2, 2012 9:52 AM
To:	Dave Hawkins <dhawkins@nrdc.org>
Subject:	stuff

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although the cat is clearly out of the bag I would urge great caution in talking to anyone, especially press and the hill about the standard or the WP--any such talk is almost certainly going to be unhelpful as its proving to be in a number of unexpected quarters.....just an FYI---I know its not you but colleagues in the community.....

COMING FOR YOUR CARBON - Top Energy and Commerce Republicans want the White House to pull back EPA's planned rulemaking on greenhouse gas emissions for new power plants, saying they worry the standards would require costly technologies like carbon capture and sequestration. "Such standards would be a back door cap-and-tax regime, circumventing the will of Congress and the American people," E&C Chairman Fred Upton and Reps. Joe Barton and Ed Whitfield wrote in a letter today to the White House. The letter: http://bit.ly/yEvHah.
WHO'S COUNTING? The greenhouse gas new source performance standards have been at OMB since Nov. 7, meaning that today marks day 87 of the 90 day review period. The EPA originally agreed, in response to a lawsuit, to propose the rule by July 2011, but now remains in settlement (re)negotiations.